ON TEST
WASHING MACHINES
MP3 PLAYERS
BREADMAKERS
CEILING FANS
LOW-FAT CREAM
MOBILE PHONES
CAR TYRES

choice

SEPTEMBER 2007
choice.com.au

Most reliable brands

The winners are...

Ethical investing: the real story

How to buy a very safe stroller

Wonder juice — really a cancer cure?

Jane Mackenzie
Editor

Would you buy that again?

It's surprising what you get to know about a product when you live with it. CHOICE subscribers who responded to our recent appliance reliability survey, for example, gave us all sorts of reasons why they wouldn't again buy their particular brand of washing machine, dishwasher, fridge, TV, oven, air conditioner, digital camera and lawnmower.

Not surprisingly, a major reason for not buying a brand again is if it breaks down too often, and you told us this was the case for Ariston washing machines, Fisher & Paykel dishwashers, Victa lawnmowers and Canon digital cameras. As if that wasn't irritating enough, you found that F&P dishwashers and Canon cameras were expensive to repair as well. F&P washing machines are also seen as pricy to repair — but, on the plus side, they're particularly quiet.

You told us Simpson dishwashers are noisy and Smegs have poor features; Samsung provides poor service for its fridges, while it's difficult to get parts for Whirlpool fridges and they're inconvenient to use. In CHOICE readers' experience, Simpson ovens have poor features and Kleenmaids are difficult to get serviced, while DeLonghi ovens are both hard to have serviced and noisy (an unusual comment on an oven).

With TVs, Panasonic and Loewe models were found to be expensive to repair, and NEC inconvenient to use. You didn't like the features on Kodak digital cameras, and found LG air conditioners particularly noisy (Daikin models, on the other hand, were quieter than most).

All this information came from just one CHOICE reader survey, not to mention the most reliable brands overall for each of the eight appliances — see the article on page 8 for that. Many thanks again to everyone who took part in the survey — you've provided invaluable information for everyone else who's thinking about buying one of the products covered in the survey.

Coming soon ...

Moisturisers with sunscreens

Do you need to pay a lot for one that suits you?

Cheddar cheese

The classic hard cheese makes a comeback.

Dual-fuel ranges

Cook like the professionals: gas cooktop, electric oven.

about choice

No advertising, no bias ... just reliable, expert advice.

CHOICE is a non-profit, non-party-political organisation, established in 1959 to provide consumers with information and advice on goods, services, health and personal finances, and to help maintain and enhance your quality of life. It's a Council member of Consumers International.

100% independent We accept no advertisements, receive no government funding and don't take industry freebies. Our income is solely from the sale of CHOICE and our other publications and services. All the products we put through full testing are bought by us in the marketplace, except occasionally, to get the latest model, we may buy directly from a manufacturer where we can select a random sample. We never accept gifts for testing from manufacturers or retailers, though we sometimes borrow samples, especially of new products, for quick reviews. There are no hidden agendas and our recommendations are completely impartial — we simply road-test products and services so that consumers don't get ripped off.

We test and rate products and services. Our ratings are based on quality without regard to price, and are derived from lab tests, expert judgments and reader surveys. If a product is high in quality and relatively low in price, we deem it a Best Buy. A rating applies only to the brand and model tested, not to other models sold under the same brand name, unless so noted.

Representing your interests We lobby and campaign on behalf of consumers to promote your rights, to influence government policy, and to ensure consumer issues have a high profile in the public arena.

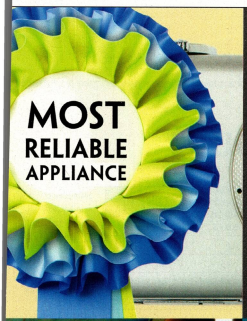
Subscribe to CHOICE

PERSONAL SUBSCRIPTIONS
One year $78, two years $145.

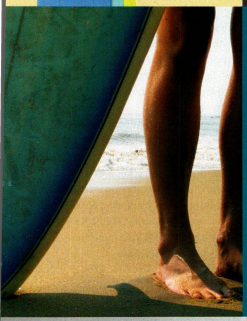
COMPANIES/INSTITUTIONS
One year $125, two years $239.
For subscription and renewal enquiries only, call 1800 069 552.

Contact us

WRITE to us at CHOICE,
57 Carrington Road,
Marrickville 2204
PHONE us on 02 9577 3399
FAX us on 02 9577 3377
EMAIL us at
ausconsumer@choice.com.au



8 Appliance reliability



20 Hair removal products

52 Breadmakers

Contents

COVER STORY

8 Appliance reliability
The brands most likely to keep the repairman from your door.

REPORTS

13 Superjuice
Açai, goji, noni, mangosteen … are they the cure-alls they claim to be?

16 Ethical investing
Even if you put your super into an ethical fund, you could still be investing in armaments, uranium, tobacco and more.

20 Skin and bare it
CHOICE's Home Testers put depilatories, epilators and wax to the test to find the best way to remove unwanted hair at home.

24 Cooking with cream
Will low-fat cream work in your recipes?

TESTS

27 Ceiling fans
Romantic but also practical: a ceiling fan is an energy-efficient way to keep cool.

30 Four-wheel strollers
CHOICE's latest tests suggest four wheels might be safer than three for your baby.

33 Mobile phones with 3G
Does the advent of 3G finally mean true multimedia functions on your phone?

38 Washing machines
A CHOICE user trial reveals most people don't fill their washing machine — and that means energy and water labels aren't based on real-life use.

44 MP3 players
Players for all users — small ones for jogging through to players with screens big enough to watch movies on.

48 Tyres
Emergencies bring out the performance differences in tyres.

52 Breadmakers
They make more than just a standard loaf: pizza dough, focaccia, yeast-free bread, cakes — even jam.

REGULARS

4 CHOICE Cuts

7 Your Letters

55 Bookshelf

56 CHOICE Campaigns: Penalty fee changes, food ads aimed at kids, Do Not Call Register update

57 Recalls and bans

59 CHOICE index: October 2006 to September 2007.

60 The Hard Word

New online savings account

A new online savings account, called RaboPlus, offers an interest rate of 6.6%. The only higher rate currently offered (with one exception — see *Account with a catch*, right) is available from the BANKWEST Telenet Saver online account — this offers 6.8% for the first 12 months and 6.25% after that.

The new account is from RABOBANK, part of the international Rabobank Group, which recently launched an online banking business in New Zealand and is one of the 20 largest banks in the world.

There's no minimum account balance and no fees are charged, but you can only access your account through the internet — you can't go into a branch and there's no phone banking. You need to link your account to a traditional account with another bank to withdraw funds.

The account offers two-factor authentication. To log on, you not only need your customer number and PIN but also a free online security device, called Digipass. The handheld device randomly generates one-time access codes, each of which is only valid for a few seconds, and you'll use a different code each time you log on. It might cause you some hassle if you want to check your account from work and haven't got the Digipass, but it makes online banking more secure, as a fraudster needs all three ID numbers to access your account. It's provided free, whereas some other banks charge you for it.

RaboPlus also gives you access to a selection of mostly wholesale managed funds with a low entry fee of 0.75% and a low $250 minimum initial investments. Term deposits are also available. For more information go to www.raboplus.com.au.

Top online savings accounts

Account (in order of interest rate)	Interest rate pa (%)	Phone banking
Bankwest Telenet saver	6.8 / 6.25 (A)	✓
Rabobank RaboPlus	6.6	
Railways Credit Union Express Saver	6.45	✓
Dnister Ukrainian Credit Co-Operative iSaver	6.4	✓
HSBC Serious Saver	6.4 (B)	✓

Source: Cannex, 6 July 2007.
(A) 6.8% for the first 12 months, 6.25% thereafter.
(B) No interest payable if you've made a withdrawal in the month.

Account with a catch

The highest interest rate of all online savings accounts is 7%, paid by the new CITIBANK Plus account.

However, this account has a catch: you need to place $5000 in a no-interest transaction account with CITIBANK. The company says it recommends the account only for investments of $30,000 and more. In fact, compared with the RaboPlus account (taking into account the interest lost by placing $5000 in a no-interest account) CITIBANK Plus is only a better deal for a minimum investment of $87,500.

ECHINACEA AND COLDS

A new study analysing the overall results of 14 separate trials on people catching colds has increased scientific confidence that the herb echinacea can decrease both the chance of catching a cold as well as how long it lasts.

The analysis suggests that taking echinacea could mean you're around half as likely to catch a cold, and it can go away almost one-and-a-half days faster.

Individual clinical trials have shown mixed results in the past. And the possible effectiveness of echinacea was publicly called into question in 2005, when a highly publicised study of 437 people found echinacea to be ineffective. However, this trial has since been criticised for using too low a dose of the echinacea variety in question to find an effect.

One of the difficulties of trialling echinacea is that there are hundreds of different preparations on the market — different varieties, different parts of the plant and different preparation methods.

However, this new analysis suggests a positive effect overall despite the differences in products. So if you're prone to colds, you may want to give it a go — but check with your GP first; it's possible it might interact with some prescription medicines.

Chocolate hit OK

Scientists already know that dark chocolate contains chemicals that can benefit your health, but there was concern that added sugar and fat would negate any benefits. A recent German study found that eating a small amount of dark chocolate each day was as effective at lowering blood pressure in people with pre-hypertension as other, more conventional changes to their diet.

The effect is believed to be thanks to the cocoa polyphenols found in foods containing high levels of cocoa. Polyphenols — chemical substances found in many plant foods — have been found to have health benefits.

The not-so-good news for chocoholics is that the amount required to have this effect was only about 6 g — to put that in perspective, the average chocolate bar is about 50 g.

Further studies will be conducted before chocolate is adopted as a conventional treatment, but it seems that including a square of cocoa-rich dark chocolate in your diet isn't such a bad thing, and can contribute to a healthier heart.

Budget laser printers

CHOICE *Computer* recently tested budget laser printers for performance, ease of use and ink consumption. It found that as the cost of laser printers has come down, they're a good choice for small-scale print runs.

The HP LaserJet 1022 scored the highest overall, although it's one of the most expensive models. The BROTHER HL-2040 rated very well for both performance and ease of use and is one of the cheapest.

GEOFF AMBLER

What to look for

- **Speed** All the models rated well for printing time. The LEXMARK E250d was the fastest, while the CANON Laser Shot LBP-3000 and the HP LaserJet 1020 were the slowest.
- **Network connection** The BROTHER HL-2070N, LEXMARK E120n and SAMSUNG ML-2571N have an inbuilt network connection. The BROTHER HL-2040, CANON Laser Shot LBP-3200 and KONICA MINOLTAPagePro 1350W have an optional add-on network connection that you buy separately. None of the printers in the test can print via a wireless connection.
- **Print options** If you want a printout of a document without using lots of paper, all the printers can print at least four pages on one sheet of paper. The two BROTHERs can even print up to 25.
- **Booklets and posters** The BROTHERs, CANONs and the EPSON can't print booklets. Only the LEXMARK E250d and the two SAMSUNGs can print posters.
- **Watermark** All but the two CANONs allow you to print a background watermark on the page.

Models tested (in rank order, with the price we paid in April 2007)

HP LaserJet 1022 (Q5912A)	$299
BROTHER HL-2040	$129
LEXMARK E250d	$306
HP LaserJet 1020	$199
SAMSUNG ML-2571N	$296
BROTHER HL-2070N	$264
CANON Laser Shot LBP-3000	$169
CANON Laser Shot LBP-3200	$209
KONICA MINOLTA PagePro 1350W	$213
LEXMARK E120n	$182
EPSON EPL-6200L	$286
SAMSUNG ML-2010	$152

- **Duplex** Double-sided printing, or duplexing, saves paper. All the printers except the CANONs and the EPSON have a duplex option, but only the LEXMARK E250d is automatic.
- **Manual feed** All the printers except the EPSON and the KONICA MINOLTA allow manual print feed.

UPDATE

UNFAIR BANK FEES

CHOICE, July 2007

National Australia Bank (NAB) has told us its periodic payment dishonour fee is $35 — NAB provided an incorrect fee to CHOICE for our July article. The bank's direct debit dishonour fee remains at $50.

WORLD CONSUMER SNAPSHOT

NO MORE 'HAVE A NICE DAY'

Major US hotel management strategists are planning to change attitudes to customer service, and especially the responses that are too often viewed as contrived and robotic, reports Ireland's *Consumer Choice*. So the generic 'Have a nice day' is destined to be replaced with normal, human, real-time comments, greetings and phrases such as 'certainly' and 'my pleasure'. How long till they become just as clichéd?

YOU'VE BEEN WARNED

Also from Ireland's *Consumer Choice* comes a warning to expect a multitude of new advertising opportunities — and lots and lots of spin — with the latest developments in the dairy market. French yoghurt producer Danone is primed to take on the likes of L'Oréal and Nivea when it launches its Essensis yoghurts, which it claims have detoxifying qualities that make it good for your skin — and competitors are expected to follow suit. The magazine points out that in France the market for ordinary yoghurts has been dropping in value, while dairy products claiming to offer special health benefits have continued to return significant annual growth.

NO WITCHES, IT'S OFFICIAL

A Bavarian district court found you don't have to pay a witch if you ask her to put a magic spell on your ex-lover to return to you — because magic is simply impossible, reports Germany's *Test* magazine.

PAY McBILLS FASTER

In China, people sick of waiting in long bank queues at lunchtime have an alternative: fast banking at McDonald's. "The only downside is they may end up eating a lunch of spurious nutritional value," says an article on www.burning-pants.com, a website with postings from financial services researchers. The 'fast food' transaction machines are an initiative of the China Everbright Bank. They enable customers to pay for things such as their phone and internet bills, concert and airline tickets; and during promotions, some transactions can even earn them McDonald's food vouchers.

Show some restraint

RTA NSW

According to a review published in the *Medical Journal of Australia*, in 2005, 72 passengers under the age of 16 were killed in motor vehicle accidents, and 1000 more were seriously injured. And while injuries were more frequent when children were unrestrained, serious injuries also happened when children were belted up — often because they'd been prematurely using adult seatbelts.

According to Dr Jeff Potter, Senior Manager, Safety, of the National Transport Commission (NTC), using adult seatbelts before the age of seven can have several adverse effects in the event of a crash: not properly restraining the child, applying force across the head or neck if the child is too short or, if the seatbelt is placed above the hips, it can compress the abdomen and can lead to internal organ damage.

Under a proposal put forward by the NTC, it will be compulsory for children up to six months old to be restrained in a rear-facing infant capsule, then a forward-facing child seat until the age of four, and a booster seat till the age of seven. Current federal legislation requires infants up to the age of one to travel in a properly fitted child restraint that's passed the Australian standard, while children above that age must travel in either a child restraint or with a properly fastened and adjusted seatbelt.

According to the *Medical Journal of Australia* review, parents are unaware of recommendations concerning the appropriate restraint for their child and when to progress to adult seatbelts. It also found that even though parents thought fitting a child restraint was easy, 20% of restraints weren't fitted correctly.

The NTC predicts these new laws could save about two lives a year and prevent around 100 injuries. It's aiming to get a recommendation to the Transport Ministries in September — so while these laws may be a little while off, CHOICE recommends that parents take note now, for safety's sake.

For more information on child restraints, or to find your nearest fitting station, contact your state motoring organisation, Kidsafe office or road safety authority. See CHOICE, December 2006, or go to choiceextra.com.au and click on Dec 06 under 'Child/baby concerns, car restraints' in the index. ■

QUICK REVIEW

PAUL SANTELMANN

Kween of karpet kleening

Model KLEENMAID VC700O Sebo Felix Fun
Price $1079
Warranty 5 years

This KLEENMAID vacuum screams retro style, but there's nothing outdated about its performance. It cleaned our test carpet more thoroughly than any other model in our previous test of expensive vacs (CHOICE, June 2007, or go to choiceextra.com.au and click on Jun 07 under 'Vacuum cleaners, expensive'). It was excellent on hard floors too and left no scratches.

Unfortunately, our tester didn't find it particularly easy to use. Its head is fairly hard to move over carpet and the handle feels heavy after you've been vacuuming for a while. The paper dust-collection bag is fiddly to change. However, the vac has excellent reach from the power point and its controls (located on the wand) are easy to operate with your thumb.

There were other vacs in our last test that cleaned well, cost less and are easier to use than the KLEENMAID. But if you want your carpets as clean as possible, price is no object and you fancy a cleaner in vivid orange and purple (it also comes in a more sedate beige and brown), this could be the vacuum for you.

Scores

- **Overall score: 80%**
- **Dirt removal from carpet: 81%**
- **Dirt removal from hard floor: 97%**
- **Cleaning corners and edges: 74%**
- **Ease of use: 62%**

Specifications

- **Reach from power point: 10.8 m**
- **Weight: 7.3 kg**
- **Contact: www.kleenmaid.com.au**

Too much packaging

In this day of global warming impacts and the importance of energy conservation in aid of reducing those impacts, I was shocked at the amount of packaging I also purchased when I bought a small USB modem from Telstra. Granted, except for the cling wrap, all the packaging is recyclable, but is anyone thinking about the amount of energy involved and CO_2 produced in the manufacture and recycling of this packaging?

First, there's the manufacture of the boxes, which involves:

- Cutting down trees and transporting them to the mill.
- Manufacturing pulp and cardboard and transporting it to the point of packaging.
- Transporting large, bulky boxes by fossil-fuel transporters.
- Recycling the packaging once the product's been unpacked.

One would suppose that, in Australia, most of this energy would come from coal-fired power stations.

Second, there's the manufacture of the plastic box and packaging the USB modem came in:

- They're produced using components from the oil industry.
- Energy must be used to transport and then recycle all of this plastic.

Is there a better solution? I'd say yes: package items in the least amount of packaging possible. Wouldn't this be a great way for large companies to reduce the amount of carbon they produce?

Although I singled out Telstra, this issue applies across the board. Something needs to be done. We, as consumers, need to say 'no' to overpackaged goods. We can make a difference!

Michelle Alderson

We couldn't agree more. In fact, if you come across overpackaged goods, send the packaging (or a photo of it) to Packaging, *CHOICE, 57 Carrington Road, Marrickville 2204, or let us know where to find the product.*

MICHELLE ALDERSON

Fair go on fees: it works!

I used your letter to request a refund of the late payment fee charged to my credit card. I just got an email back telling me that the charges were set out in the terms that I agreed to when operating my account but, as a gesture of goodwill, on this occasion the fee will be reimbursed.

So I'd like to thank you for providing this information and keep up the good work at 'keeping the bastards honest'!

Leanne Pearce

We're glad to hear our 'Fair go on fees' campaign is working for Leanne and all the others who told us they got fees reimbursed.

THUMBS UP!

- Drew Tait had a happy experience courtesy of STREAMLINE PRODUCTS, the distributor of ZUCCHETTI tapware. His sink mixer with pull-out spray had come loose periodically since installation three years ago. This time, rather than tighten it again, he contacted STREAMLINE to order some parts, suspecting it may not have been installed properly during kitchen renovations. The company arranged a convenient time and sent parts as well as a plumber, who completely reinstalled it, free of charge.

When you do need two eye drops

Upon reading the *World Consumer Snapshot* 'Save on eyedrops' (CHOICE, June 2007), I was concerned that some people may misread the advice given: that only one drop is necessary, as the eye can only hold one drop at a time.

While this was clearly for eye drops where the instruction is for 'one to two drops', this advice doesn't refer to eye drops for which more than one drop is specifically prescribed.

If you've been prescribed more than one drop, and you reduce it, you may not be receiving the recommended dosage, which could have an adverse affect on your eye health. So in this case, instil one drop, wait a few minutes until it's absorbed and then instil the next.

If you're not sure about any medication or instructions given, seek further advice from your doctor or pharmacist.

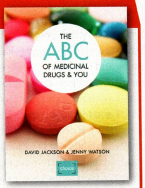
Lauren O'Neill

LETTER OF THE MONTH

We want to hear from you — your experiences help our research and let other readers know about scams and rip-offs. We're also keen to hear about positive outcomes you've had to a complaint you took to a manufacturer, retailer, importer or service provider. Address these letters to *Thumbs up!* at the address on page 2.

To thank you for writing to us, *Your Letters* awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner, Michelle Alderson, receives *The ABC of Medicinal Drugs & You*, or any other book of her choice from *Bookshelf*, page 55, or the list on choice.com.au/books.

We're sorry we don't have the resources to answer all your letters personally, and in the magazine, we may edit them or print only an extract. See page 2 for how to reach us.



You told us: digital cameras are the most reliable product, and for large home appliances, choose Bosch or Miele.

The reliable choice

IN A NUTSHELL

- **MIELE and BOSCH get the big thumbs-up for major appliances: they're the most reliable brands of washing machines, dishwashers and ovens.**
- **Digital cameras and televisions are the most reliable of the eight appliances in the CHOICE survey — dishwashers and lawnmowers broke down the most.**

You know the big brand names; you've heard the flashy promises and battled with the jargon, but when it comes to determining their long-term reliability, it's a bit of a stab in the dark. CHOICE'S tests pick out the top performers when they're brand-new, but to complete the whole puzzle, we need you to tell us about their reliability.

Our reliability survey, which is updated every few years, went out to 60,000 members of the CHOICE community in the March 2007 issue, asking you to spill the beans on the reliability of popular brand-name appliances. We've collated all the information you sent back to bring you an updated guide to the most reliable appliance brands on the market — and the turkeys to avoid.

This time around we asked you about the reliability of washing machines, fridges, dishwashers, televisions, ovens, digital cameras, air conditioners and lawnmowers, and whether you'd buy the same brand again.

Based on your responses, the most reliable appliances you own are digital cameras and televisions, while the machines most likely to need repairs are dishwashers and lawnmowers.

For three major household appliances (washing machines, dishwashers and ovens), BOSCH and MIELE top the reliability list — and our tests show that their models are often among the best performers as well.

Along with our test results, we recommend using CHOICE's reliability information when you're next purchasing a new appliance — a bargain won't turn out to be such a bargain if you're forking out afterwards for endless repairs.

HOW TO USE THIS REPORT

- The overall average reliability for a given appliance is shown in the top row of each set of results, then brands are shown in descending order of reliability.
- When we list the most common problems with products, this information applies only to appliances up to three years old (bought in or after 2004), referred to as 'newer models', and includes all problems reported, not just repairs.
- When we say 'a difference of x% or more between brands is statistically significant', this means we had enough responses to be statistically confident that differences of x% or more weren't caused by chance.

What about ...?

- If your brand isn't listed for an appliance, it's usually because we didn't have a large enough sample size to accurately report on it.
- If the appliance you're interested in isn't covered this year, take a look back to the last survey in CHOICE, August 2004, which included clothes dryers and DVD players.

HOW WE TESTED

- In the March 2007 issue, 60,000 CHOICE subscribers received the reliability survey. Of those, 13,397 returned it by the cut-off date, which gives us a response rate of 22%. Thanks to all of you who took part and congratulations to our prize winner, Peter Wood of NSW, who won a Panasonic NV-GS300 digital camcorder worth $1500.
- The survey asked: what brand you bought and when you bought it; whether it had needed repair in the previous 12 months; what the problems were; whether you'd buy the brand again; and if not, what the reasons were.
- Only appliances bought in the last seven years were analysed for reliability, and the results were standardised for the age of the machines to ensure that brands represented by a lot of older models aren't unfairly penalised. Only brands rated by a minimum of 100 respondents were included for brand reliability analysis.
- Only machines purchased in the last three years were analysed for the types of problems users experienced.

Fridges

CHOICE readers think bigger is better. Over half (55%) of the fridges you purchased in or after 2000 were either 'large' or 'extra large'.

All in all, fridges are pretty reliable appliances, as our survey found that only 9% of them had needed repair in the 12 months before our survey. Unfortunately for the owners of extra-large fridges, though, this was the most unreliable size, with 12% of them needing repair in this time.

For the newer machines (bought in or after 2004), the survey found the following significant problems:

- Excessive noise: FISHER & PAYKEL (6%).
- Door seal: KELVINATOR/ELECTROLUX (5%).
- Leaked gas/compressor: KELVINATOR/ELECTROLUX (4%).

In this category, reliability = loyalty except for WHIRLPOOL, where 23% of those who wouldn't buy that brand again had found it inconvenient to use.

Percentage not needing repair in the last 12 months*

ALL FRIDGES (6286)	91
WESTINGHOUSE (1806)	93
KELVINATOR/ELECTROLUX (608)	92
LG (456)	92
SAMSUNG (294)	92
FISHER & PAYKEL (2072)	91
WHIRLPOOL (272)	88
GE (132)	84
MAYTAG (162)	83

* *The number in brackets is the number of responses received for that brand. Differences of 8% or more are statistically significant.*

Digital cameras

Snap-happy readers will be pleased to know digital cameras came out on top as the most reliable appliance, with 96% not needing repairs in the 12 months before the survey. So your holiday snaps are pretty safe. Most of the brands mentioned in our table are very reliable. CASIO and RICOH were the least reliable, with 9% of CASIO and 10% of RICOH cameras breaking down in the 12 months prior to the survey.

Problems for newer machines were:

- Batteries: KODAK (7%).
- Lens: RICOH (7%).
- Shutter: RICOH (6%).
- Storage cards: FUJIFILM (3%).

Owners of CANON and PANASONIC digital cameras were most likely to buy the same brand again, while FUJIFILM, KODAK, RICOH, KONICA MINOLTA (no longer available) and SAMSUNG owners were significantly less likely to buy those brands again. 29% of those who wouldn't buy KODAK again said it was because of its "poor features". Overall, 26% of those who wouldn't purchase their brand again said poor performance was the biggest influencing factor, while 20% said ease of use was very important.

Percentage not needing repairs in the last 12 months*

ALL DIGITAL CAMERAS (9122)	96
KODAK (1052)	98
PANASONIC (534)	97
FUJIFILM (618)	96
KONICA MINOLTA (189)	96
NIKON (565)	96
OLYMPUS (1121)	96
SONY (900)	96
CANON (2753)	95
PENTAX (488)	95
SAMSUNG (122)	93
CASIO (193)	91
RICOH (207)	90

* *The number in brackets is the number of responses received for that brand. Differences of 6% or more are statistically significant*

Washing machines

Top-loading washing machines are the most popular among the CHOICE community (57% own one), but it seems our water-saving message is making an impact, as front loaders are steadily gaining in popularity — only 32% of you owned one back in 2004, compared to 42% now. Our survey found no significant difference in reliability between the two types.

BOSCH and MIELE were at the top of the table for reliability, and not far behind were SAMSUNG, SIMPSON, FISHER & PAYKEL and WESTINGHOUSE.

Problems for newer machines included:

- Out-of-balance problems: MAYTAG (10%).
- Leakage (other than burst or leaking hoses): MAYTAG and WHIRLPOOL (6%).
- Gearbox: ARISTON (5%).
- Inlet valves: KLEENMAID (5%).
- Rust: WHIRLPOOL (4%).
- Pump: LG (3%).

Owners of MIELE, BOSCH and FISHER & PAYKEL washing machines are more likely to buy the same brand again, while significantly fewer would repurchase a WHIRLPOOL, LG, MAYTAG or ARISTON machine. The survey found that 29% of owners who wouldn't buy ARISTON again said, by way of explanation, that it "breaks down too often".

Percentage not needing repairs in the last 12 months*

ALL WASHING MACHINES (7000)	90
BOSCH (328)	97
MIELE (432)	95
SAMSUNG (237)	92
SIMPSON (754)	92
FISHER & PAYKEL (1805)	90
WESTINGHOUSE (260)	89
ASKO (296)	88
WHIRLPOOL (697)	88
LG (698)	87
MAYTAG (207)	85
KLEENMAID (130)	83
ARISTON (127)	77

* *The number in brackets is the number of responses received for that brand. Differences of 9% or more are statistically significant.*

Ovens

No significant differences in reliability were found between gas and electric ovens, though gas ovens were likely to have more niggling problems with timers (5%) and ignitions systems (6%). However, this doesn't affect the 89% of you who own an electric oven.

Again, BOSCH and MIELE are sitting comfortably at the top of the reliability table.

Problems for newer machines were:

- Door hinges: DELONGHI (6%).

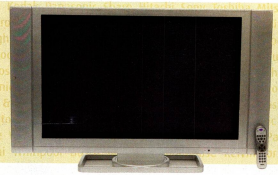
While DELONGHI had a good reliability record, some owners mentioned that their machines were noisy and that, when they did break down, it was difficult to get service for them.

KLEENMAID owners also complained of difficulty in getting service, and one in six SIMPSON owners complained of poor features.

Percentage not needing repair in the last 12 months*

ALL OVENS (4330)	88
BOSCH (156)	95
MIELE (292)	94
DELONGHI (100)	88
FISHER & PAYKEL (382)	88
BLANCO (189)	87
ILVE (108)	87
SIMPSON (174)	87
SMEG (288)	87
WESTINGHOUSE (874)	87
CHEF (458)	85
KLEENMAID (178)	85

* *The number in brackets is the number of responses received for that brand. Differences of 8% or more are statistically significant.*



Televisions

You're not likely to have to spend many nights without a TV — as in our 2004 survey, they were the second-most reliable appliance of the eight surveyed.

Television technology has progressed in leaps and bounds since 2004, and it seems you've caught on — ownership of LCD screens has grown from 1% to 15%, and of plasma screens from 1% to 12% in that time. 80–120 cm TVs were the least reliable, but even with these, only 8–9% had broken down in the 12 months leading up to the survey. There was no significant difference in reliability for plasma and LCD.

Problems experienced for newer machines were:

- Picture: TEAC (13%).

As reliability for all the brands surveyed is quite good, it seems that loyalty to a television brand comes down to performance — 28% of you who wouldn't buy the same brand again said it was because it had performed poorly.

95% of SHARP, SONY and PANASONIC television owners said they'd buy the same brand again, while owners of a PALSONIC or TEAC were much less likely to repurchase that brand.

Percentage not needing repairs in the last 12 months*

ALL TELEVISIONS (8319)	94
SHARP (381)	98
HITACHI (180)	97
SONY (1184)	97
TOSHIBA (154)	97
PANASONIC (1462)	96
SANYO (171)	96
NEC (358)	95
PALSONIC (144)	95
LG (1302)	94
SAMSUNG (520)	93
PHILIPS (497)	91
TEAC (321)	90
LOEWE (215)	88

* *The number in brackets is the number of responses received for that brand. Differences of 6% or more are statistically significant.*

BEFORE YOU BUY

- **Ask about the servicing arrangements — if something goes wrong, especially if you live outside a metropolitan area, you don't want to have to ship a fridge halfway across the country to have it fixed.**
- **If you're buying a brand manufactured overseas, make sure spare parts are readily available in Australia.**
- **If your appliance breaks down after the warranty expires, you may still be entitled to what's called 'implied warranty rights' under the Trade Practices Act, which say manufacturers must provide goods of 'merchantable quality' that meet the basic level of quality and performance expected for their price and description. So, for example, if your expensive television breaks down just after its written warranty expires, you may still be entitled to a refund or repair.**

Reverse-cycle air conditioners

An air conditioner can make those hot, uncomfortable summers more bearable, but not if it continually breaks down. According to our survey, wall/window units are the most reliable, with only 4% needing repair in the year before the survey, and ducted air conditioners the least reliable, with 15% needing repair in this period.

In terms of reliability, there's not much difference between most brands, with the exception of CARRIER, which may have you calling the repairer more frequently. No big brand names had any standout problems, but when we grouped together all the 'other' brands (those for which we had insufficient responses to report on by individual brand), we found they tended to have problems with their compressor (4%), controls (4%) and fan (3%). So it might be worth sticking with the brands in the table.

Owners of DAIKIN, MITSUBISHI, FUJITSU and PANASONIC said they'd be likely to buy the same brand again, while LG and CARRIER owners were the least likely to stick with the same brand. One in eight LG owners said they wouldn't buy an LG air conditioner again because they're too noisy.

Percentage not needing repairs in the last 12 months*

ALL AIR CONDITIONERS (5018)	90
MITSUBISHI (493)	96
ELECTROLUX/KELVINATOR (144)	95
PANASONIC (552)	93
DAIKIN (1283)	92
FUJITSU (789)	92
LG (362)	90
CARRIER (199)	86

* *The number in brackets is the number of responses received for that brand. Differences of 5% or more are statistically significant.*

Dishwashers

Our survey found dishwashers to be the least reliable of the eight appliances it covered, so it can be worth paying extra for one that won't throw tantrums.

FISHER & PAYKEL is one of the most popular brands of dishwasher for CHOICE members (16% of dishwasher owners have one), but it's towards the bottom of the reliability table — 20% had broken down in the 12 months prior to the survey. Worst was KLEENMAID, though: owners of this brand had to fork out more frequently for dishwasher repairs, with 29% of KLEENMAID machines breaking down just in that time.

BOSCH machines were crowned the most reliable of the dishwashers, so even though they generally cost more, they're likely to save you on repairs in the long run.

Problems for newer machines were:

- Door springs/hinges/latch/seal: KLEENMAID (17%)
- Baskets and racks: KLEENMAID (11%), LG (10%).
- Control switches: LG (9%).
- Pump: LG (9%).
- Spray arm: LG (6%).
- Timer: SMEG (6%).

Unsurprisingly, given their low breakdown rates, BOSCH and MIELE owners are more likely to buy their brand again, which repeats the results of the 2004 survey — this time, 94% of MIELE and 93% of BOSCH owners gave them the thumbs-up. SMEG, LG, KLEENMAID and SIMPSON owners are the least likely to buy the same brand again. The reason given for not rebuying SMEG (only 64% of owners would buy it again) wasn't reliability but "poor features", while 12% of SIMPSON owners thought their machine was too noisy.

Percentage not needing repair in the last 12 months*

ALL DISHWASHERS (5049)	85
BOSCH (318)	95
MIELE (697)	92
WHIRLPOOL (152)	90
WESTINGHOUSE (414)	89
SIMPSON (146)	88
BLANCO (127)	87
DISHLEX/ELECTROLUX DISHLEX (790)	87
ASKO (350)	83
FISHER & PAYKEL (830)	80
SMEG (140)	79
LG (288)	75
KLEENMAID (152)	71

* *The number in brackets is the number of responses received for that brand. Differences of 9% or more are statistically significant.*

Lawnmowers

Lawnmowers came in as the second-least reliable appliance in the survey. Although VICTA is the most commonly owned brand, it's also one of the least reliable, along with ROVER and MASPORT. Despite this, 91% of VICTA owners would buy the brand again.

Perhaps not surprisingly, manual push lawnmowers are the most reliable type, followed by electric and battery-operated models, with petrol mowers bringing up the rear.

Problems for newer machines were:

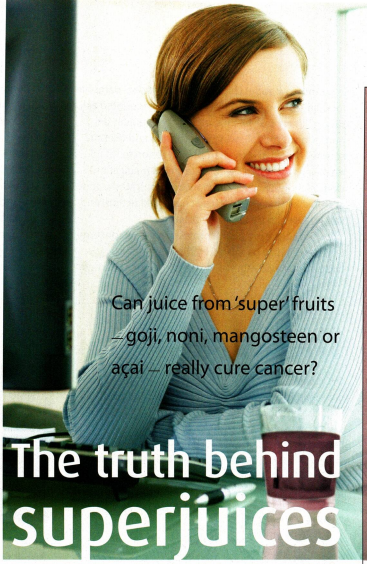
- Around 9% of all lawnmowers had problems with starting, with two-stroke motors the worst offenders.

HONDA owners are the most likely to buy the brand again and — despite the mowers requiring the fewest repairs — owners of FLYMO were the least likely. This could be due to perceived poor performance and ease of use, which were commented on by owners, though not significantly more often than for the other brands.

Percentage not needing repair in the last 12 months*

ALL LAWNMOWERS (4113)	86
FLYMO (154)	97
HONDA (454)	89
MASPORT (377)	87
ROVER (587)	86
VICTA (1428)	85

* *The number in brackets is the number of responses received for that brand. Differences of 4% or more are statistically significant.*



Can juice from 'super' fruits – goji, noni, mangosteen or açai – really cure cancer?

The truth behind superjuices

Forget about an apple — if you really want to keep the doctor away, you need to knock back a daily dose of juice from goji, mangosteen or some other even more exotic 'super' fruit… or so say the distributors of these products. Most suggest having at least one 30 mL serve a day.

Açai (pronounced ah-sigh-ee), goji, mangosteen and noni fruits have a long history of traditional use. But it's only in relatively recent times that they've gained the 'superfruit' tag, been actively marketed and entered the mainstream — so that now you can even find packs of dried goji berries adorning the aisles in Woollies.

Most superfruit products, however, are still sold in Australia via a multi-level (network) marketing system. You can buy bottles of juice direct from distributors (or 'independent marketing executives'), who hand out samples and marketing brochures behind promotional displays in shopping malls, healthfood stores and gyms, and earn commissions on sales. Superfruit juices and related products are also sold online.

You'll pay anything from $40 to around $85 a bottle if you buy your superjuice this way. If you sign up as a member or become a distributor yourself, you'll get a discount.

So why buy them? The marketing message that's common to all superfruits is that they — and their derivative products — are packed full of antioxidants. We tested the antioxidant activity of nine juices, and it wasn't as high as their marketing hype had led us to expect.

About antioxidants

Antioxidants are groups of chemicals found in foods, especially fruit and vegetables, that help protect the body's cells from the harmful effects of free radicals. The damage caused by free radicals has been associated with the development of cancer, heart disease, Alzheimer's and Parkinsons, and is linked to the aging process.

Marketing literature for many superfruit juices refers to their superior antioxidant activity (compared with other fruits), as measured using the oxygen radical absorbance capacity (ORAC) assay. For example, goji berries have 10 times and açai berries six times the antioxidant capacity of blueberries — or so it's claimed. This might well apply to the whole fruit, but what about the juice products on sale?

We used the ORAC assay to determine the total antioxidant capacity (TAC) of nine products; the results are shown in *The Juice*, pages 14–15. It turns out that if it's antioxidants you're after, you're probably better off eating an apple (or many other more common fruits).

You'd need to drink almost five 30 mL serves of TAHITIAN Noni Juice to match the TAC of a navel orange (2540). Three 30 mL serves of XANBERRY Mangosteen Juice Plus would still fall short of matching the TAC of a cup of strawberries (5938), raspberries (6058) or cultivated blueberries (9019). And the TAC of the humble Red Delicious apple (5900) is roughly equivalent to ten 30 mL serves of HIMALAYAN Goji Juice.

The hype for some superfruit products goes beyond touting their antioxidant capacity, however, and could leave you believing they're nothing short of a miracle.

Extreme marketing

One marketing brochure for goji juice lists no fewer than 34 reasons to drink it every day, including to "enhance libido and sexual function", "treat menopausal symptoms", "improve your memory" and even "inhibit tumor growth". >

IN A NUTSHELL

- **So-called 'super' fruits — goji, noni, mangosteen and açai — are rich sources of antioxidants, but some of the marketing hype exaggerates the benefits of their juices. There's no good evidence that drinking them will cure diseases such as cancer or diabetes.**
- **You can pay as much as $85 for a litre of one of these juices. On a serve-by-serve basis, many common fruits, such as strawberries and apples, contain more antioxidants, and are cheaper.**

< And how about this from a promotional pamphlet for mangosteen — an unnamed doctor is quoted as saying: "In my opinion, the mangosteen equals or outperforms the following prescription and over the counter drugs", and the pamphlet goes on to list 46 medicines including Celebrex (arthritis medication), Lipitor (cholesterol-lowering medication), Methadone (a painkiller that's used to treat heroin addiction) and Valium (used to treat anxiety disorders).

It's not surprising health professionals are concerned that people may be misled by this sometimes overzealous marketing, and spend their hard-earned cash on expensive juice in the mistaken belief that it will act as a cure-all.

Of even greater concern is the potential for vulnerable people to be exploited — someone with cancer, say, who's desperate to try anything that might help. Not only can unsubstantiated health and therapeutic claims give people false hope and lead to disappointment if expectations for recovery or cure aren't met, but it may even be dangerous, if a superfruit juice or product is substituted for prescribed conventional medication.

The juice

CHOICE tested the total antioxidant capacity (TAC) of nine different superfruit products — four goji, two noni, two mangosteen and one açai. We've given the TAC of a single serve of each product, and shown this as a percentage of the TAC of a Red Delicious apple for comparison (in brackets). We examined the different brands' websites as well as the marketing literature on display where they were sold. We also reviewed the evidence for health benefits of these products.

Açai

Brand tested

- NU Açai and Guarana, from RioLife (contains 14% açai pulp). **TAC** 1800 per 30 mL (31% of the TAC of a Red Delicious apple 🍎).

Price paid $12 for 500 mL.

The lowdown

Amazonian açai, the cherry-sized purple berry fruit of the açai palm, deteriorates rapidly after harvest. This "amazing energy berry" is usually only available outside the Amazon as juice or pulp that's been frozen, dried or freeze-dried. Pulp can be added to juices or smoothies. The Boost juice bar chain sells an açai and guarana combo juice as the 'açai NRG shooter'.

Açai is reported to contain high levels of anthocyanins, compounds with antioxidant activity that are also responsible for its deep purple colour. According to RioLife's marketing literature, açai was rated by a doctor on the TV show *Oprah* as "the #1 food for anti-aging benefits". NU FRUITS' website says açai berries have "six times the antioxidant level of blueberries" and touts them as a great source of essential fatty acids and energy, but holds back from making specific health claims.

Research confirms açai's high antioxidant levels, and lab studies suggest it may have anti-cancer and anti-inflammatory effects, as well as a possible use in treating heart disease. But human studies on its health effects are yet to be published.

Goji

Brands tested

- ABSOLUTE RED NingXia Wolfberry Purée (100% puréed goji berries). **TAC** 2025 per 25 mL (34% 🍎).
- HIMALAYAN Goji Juice from FreeLife (90% goji juice from concentrate). **TAC** 570 per 30 mL (10% 🍎).
- MEDICINES FROM NATURE Goji Juice (90% goji juice from concentrate). **TAC** 690 per 30 mL (12% 🍎).
- TREE OF HEALTH Goji Juice Blend (90% goji juice from concentrate). **TAC** 1440 per 30 mL (24% 🍎).

Price paid From $45 to around $85 for 1 L.

The lowdown

The goji berry, or wolfberry, has been cultivated and eaten in Himalayan regions for centuries. According to ABSOLUTE RED, goji is "the greatest natural source of antioxidants on the planet". Dr Earl Mindell, th e 'face' of FreeLife and reported to be "the world's foremost authority on the goji berry", is quoted as saying, "I believe goji juice will have a more powerful benefit on health, well-being and anti-aging than any other product I have seen in the last 40 years."

Cellular and animal studies have investigated the impact of goji on the growth of human leukemia cells, aging, vision, insulin resistance and infertility, among other things. Results from many show a positive effect, and it's suggested that polysaccharides unique to goji may play a key role. But good-quality clinical studies providing evidence for reported benefits in humans are lacking. If you take warfarin, see your doctor before drinking goji, as they may interact.

CHOICE VERDICT

- **Superfruit juices contain a range of nutrients, but marketing spin has vastly exaggerated their health benefits. Until there's much better scientific evidence, it's cheaper and wiser to get antioxidants from other fruit (and veg) sources. A wide variety of types and colours of fruit and veg can help protect against diseases such as cancer, heart disease and type 2 diabetes — in part due to phytochemicals such as antioxidants, but also due to other nutrients they contain, including fibre.**
- **Look into the claims and you'll find there's very little evidence to back them up. Testimonials abound, but they're purely anecdotal. Marketers occasionally cite long lists of lab studies as 'proof' of the health benefits claimed. While some of the results of these studies are promising, there are few clinical trials, and what happens in a test tube or animal may not occur in humans. CHOICE looked in more detail at the scientific evidence for each fruit and has summarised our findings in *The juice,* below.**
- **Health and therapeutic claims for food are currently prohibited under the Australia New Zealand Food Standards Code. Several websites for superfruit products pay lip-service to this fact by posting a disclaimer such as "this product is not intended to diagnose, treat, cure or prevent any disease". But the health claims that appear above the disclaimer tell a different story. It's clear that the regulation isn't being effectively enforced for these products.**

Mangosteen

Brands tested

- XANGO Whole Fruit Beverage (an undisclosed % of mangosteen, from concentrate). **TAC** 1020 per 30 mL (17% 🔴).
- XANBERRY (an undisclosed % of puréed mangosteen). **TAC** 1710 per 30 mL (29% 🔴).

Price paid Approx. $50 for 750 mL.

The lowdown

Mangosteen, Asia's so-called 'queen of fruits', is a tropical fruit with a thick purplish rind and segmented white flesh. It's purported to contain more xanthones — a compound that may have antioxidant properties — than any other fruit.

Literature given to us by a XANGO distributor makes strong claims about the fruit, including, "Lab studies show that mangosteen xanthones outperform current chemotherapy drugs in killing liver, lung and stomach cancer cells." XANBERRY marketing talks more generally about the antioxidant power of mangosteen fruit and the benefits of xanthones and antioxidants, but it claims that one bottle of XANBERRY has over double the antioxidant levels of goji juice.

Scientific research confirms that a variety of xanthones can be isolated from mangosteen plants and fruits. There are also a number of lab studies that suggest mangosteen extracts may have a use in the treatment of some cancers. But clinical trials on real people are lacking.

Noni

Brands tested

- TAHITIAN Noni Juice (89% noni fruit juice purée).

TAC 540 per 30 mL (9% 🔴).

- TREE OF HEALTH Noni Juice (100% noni fruit juice).

TAC (525 per 25 mL (9% 🔴).

Price paid Approx. $40 to $60 for 1 L.

The lowdown

Noni, a lime-green Polynesian tropical fruit, has a long history of medicinal use. Typically it's the roots, bark and leaves that are used for different remedies, usually by applying them externally to the skin or to wounds.

The website of market leader TAHITIAN Noni Juice refrains from making extravagant claims about its product. It says the fruit "provides powerful antioxidants, boosts the immune system and increases energy", the inference being that the juice will too.

TREE OF HEALTH, however, doesn't hold back. It quotes a contemporary Hawaiian healer as saying, "I have used noni to help people with cancer, kidney problems, diabetes and tumors." It also lists dozens of testimonials from people who found that drinking noni juice resulted in lower blood pressure, stronger nails and even improvements to their golf game.

Noni fruit and juice derivatives have shown anti-tumour activity in rats and mice, but clinical data is scant. Of most interest is a trial in which cancer patients were given daily capsules (not juice) containing noni fruit extract. No tumour regressions were observed, but quality of life (as measured by a decrease in pain interference with activities) improved. ■

POMEGRANATE

We didn't come across straight pomegranate juice when we were doing our research, but given its popularity in the UK and the US (in the form of brands such as POM and POMEGREAT), it's bound to be similarly popular here soon.

Just like other superfruits, ads for pomegranate juice refer to it as an antioxidant superpower. There's some preliminary human evidence that the juice may help to reduce your cholesterol levels and keep your circulatory system healthy. However, it also appears to interfere with an enzyme that's critical to the proper metabolism of many common medications. So if you take any drugs on a regular basis, check with your pharmacist or GP before you try pomegranate juice.

You'll be surprised by where some 'ethical' and 'sustainable' funds invest your money.

The colour of money

baldwin

IN A NUTSHELL

- **Most ordinary investment funds and super funds invest in industries such as gambling, defence, alcohol, tobacco, coal and uranium. And some 'ethical' and 'sustainable' funds invest there, too.**
- **CHOICE looks past the marketing labels like 'responsible', 'sustainable' and 'ethical' to find out where your money is really going.**

Did you know that huge chunks of our superannuation — which is now worth more than a trillion dollars — are invested in companies involved in industries such as old-growth forestry logging and uranium mining, and products that cause greenhouse gas pollution? Or that state governments' super funds are investing hundreds of millions of dollars of their employees' super in gambling, cigarette and oil companies?

When making investments, super funds and fund managers aren't required to take into account labour standards and social, ethical or environmental considerations, unless they specifically say they do. That's where 'ethical' and 'sustainable' investing comes in.

Or does it? Even if you opt for what you think is the 'green' option on your super fund's investment menu, you might still be directing money into some of those industries. Here are some examples, which reflect what's going on in much of the industry:

- Most 'ethical' and 'sustainable' funds in Australia invest in big uranium mining companies such as BHP Billiton and Rio Tinto. Funds justify this on the basis that the uranium is used for nuclear energy, not weapons, or that the companies chosen get a limited proportion of their overall revenue from uranium, or that they have good environmental, social or corporate governance performance.
- A number of sustainable funds invest in companies that have direct involvement in gambling. One example is MACQUARIE BANK, which has gaming joint ventures with Tattersalls in the UK and Publishing and Broadcasting (PBL). Until recently, BT FINANCIAL GROUP's Australian Sustainability Share Fund invested in PBL and poker machine producer Aristocrat Leisure. (The fund doesn't currently hold those stocks, and BT also offers an 'ethical' fund that avoids investing in gambling, tobacco and companies that mine uranium for weapons manufacture; see Table 1, above right).
- SUSTAINABLE ASSET MANAGEMENT invests in Tabcorp and cigarette giant British American Tobacco, and its investment approach means that no legal industry (including, for example, armaments) is off limits.

In some cases, a broad interpretation of what can be allowed into 'sustainable' funds flows from the fact that a super fund is legally obliged to make as much of a profit for its members as it reasonably can. This necessity prevents funds from heading off down ethical

Table 1: Examples of large, responsible investment (RI) retail superannuation funds (Australian shares, in alphabetical order)

Fund name	Other large funds offering this investment*	Investment returns (% pa)			RI approach			Industries included**			
		1 year	3 years	5 years	Best of sector	Positive screen	Negative screen	Alcohol manuf.	Defence	Gambling	Uranium mining
AMP Capital Sustainable Share	Qsuper, UniSuper, ARIA, Sunsuper	23.99	23.90	18.03		✓	✓	✓	✓	✓	✓(D)
Australian Ethical Super Equities	Asgard, Navigator, Macquarie Wrap	32.84	21.12	15.77		✓	✓				
BT Institutional Australian Sustainability Share	Australian Super, BT SuperWrap, UniSuper	23.76	25.27	17.62	✓			✓	✓	✓	✓
BT Institutional Ethical Share	Australian Super, BT SuperWrap, UniSuper	32.99	31.65	23.63		✓	✓				✓(E)
Challenger Socially Responsive Share	Asgard, BT Wrap, Macquarie Wrap	28.46	23.92	16.81		✓	✓	(B)	(B)	(B)	(B)
Hunter Hall Australian Equities	Asgard, BT Wrap, ING, Macquarie Wrap	35.42	18.14	na			✓	✓			
ING Sustainable Investment Australian Share	ANZ & ING One Answer, ANZ & ING Corporate Super	26.84	24.41	na	✓	✓	✓	✓	✓	✓	✓
Perpetual Ethical SRI	Australian Super, BT SuperWrap, MLC MasterKey	33.17	25.33	na			✓	(C)	(C)	(C)	(C)
SAM Sustainability Leaders Australia Fund (A)	Vic Super, JUST Super, Statewide, Vision Super	25.17	24.93	17.16	✓			✓	✓	✓	✓
Benchmark ASX 200 Index		28.70	26.30	19.32	✓			✓	✓	✓	✓

Investment returns as at 30 June 2007. Source: Morningstar.
** Or a similar option from the same fund manager.*
*** Shows whether the fund can or can't invest in these industries.*
no Not available.
(A) Investment returns provided by SAM.
(B) Challenger may invest in this industry in volatile markets for risk management purposes.
(C) Not allowed if the company receives a 'material proportion' of its revenue from this industry.
(D) AMP's 'materiality' clause means that it invests in BHP Billiton, as the company gets less than 5% of its revenue or profits from uranium.
(E) Not for weapons manufacture.

USING TABLE 1

The table shows a range of ethical and sustainable super funds, the different investment approaches they take, and examples of where they can and can't invest. Some of the same options are often available through large super funds.

paths that might be too speculative or risky, and makes some mainstream investment in areas like uranium mining and banking almost inevitable. You might want your investments to improve the world rather than damage it, but you still want money to retire on at the end of the day (Table 2, right, shows some average comparative returns).

So what do 'ethical' and 'sustainable' investing mean and what are the differences between the funds on the market?

Two types of fund

The industry, which can be broadly labelled the 'responsible investment' (RI) sector, offers two distinctly different types of fund. Their names are often used interchangeably and some RI funds use a combination of the two approaches:

- **'Ethical' funds** Investment strategies are guided by an ethical or moral framework. The fund manager usually seeks out companies that it believes have a positive social or environmental impact (this is called positive screening — a 'dark green' approach), and avoids companies that have a negative social or environmental impact (known as negative screening — a 'light green' approach). Of course, how each ethical fund manager defines subjective terms such as 'ethical' and 'positive impact' differs — their product disclosure statements, which are usually available online, should provide an explanation. For examples of traditional ethical funds, see *A deeper shade of green* on page 19.
- **'Sustainable' and 'responsible' funds** The majority of funds in the RI sector define themselves as sustainable or responsible, rather than ethical. Some of these funds invest in industries such as gambling and tobacco, if they rate the companies chosen as being sustainable for the long term — a 'best of sector' approach. Other sustainable funds invest in industries that are usually negatively screened out, as long as the revenue that the companies chosen get from those industries is not a 'material proportion' — for example, 5% or more — of their overall revenue. In fact, many of

Table 2: Ethical/sustainable share funds keeping pace

Fund comparisons	1 year (% pa)	3 years (% pa)
Average Australian ethical share fund	29.4	26.3
Average Australian share fund	26.1	24.6
S&P/ASX 200 Accumulation Index	28.7	26.3

USING TABLE 2

Over three years, the annual return from the average ethical/sustainable Australian share fund was 26%. That's similar to the overall share market's growth (ASX 200 Index) and slightly better than the average 'ordinary' Australian share fund. Of course, individual ethical, sustainable and ordinary share funds performed better and worse than these average figures. Source: Morningstar.

the top shareholdings of these 'sustainable' funds end up being very similar to the shares held by the same companies' ordinary investment funds.

Shift to sustainability

There's been a reduction in the number of firms calling themselves 'ethical', with terms like 'sustainable' and 'socially responsible' used instead. Even the industry's representative body, the Ethical Investment Association, is changing its name to the Responsible Investment Association of Australasia. "The name change reflects an expansion of the sector rather than a shift away from ethical investing," says its Executive Director, Louise O'Halloran. "Our name will now be in line with the growth in the sector and capture the diversity of our members."

Most of the sustainable funds listed in Table 1, page 17, restrict investment in certain industries, although some have relaxed the rules in recent times. For example, BT changed its position on uranium in 2005, allowing into its ethical and sustainable portfolios companies that mine it for use in nuclear energy, arguing that it's cleaner than coal. That's a controversial issue, though — some deep-green investment funds still oppose uranium.

AMP's Sustainable Funds team thinks nuclear power and the uranium industry are neither financially nor environmentally sustainable. It doesn't invest in companies that are 'primarily' involved in uranium mining, but does invest in BHP, which gets less than 5% of its revenue from uranium.

Best of a bad lot?

Some sustainability funds take a 'best of sector' approach, allowing them to invest in, say, the top 20% to 35% of companies in every sector, ranked on sustainability performance grounds. This can allow funds to invest in companies from every industry, as long as they rank the companies chosen comparatively well for environmental, social and governance (ESG) criteria.

For example, SUSTAINABLE ASSET MANAGEMENT (SAM), which developed the Dow Jones Sustainability Index (DJSI) and the Australian SAM Sustainability Index (AuSSI), can invest in any industry, as long it believes the sector and at least one of its companies are moving in a positive direction towards a sustainable future, and the sector has listed companies on the stockmarket.

The DJSI has 58 industry sectors including, for example, tobacco. Although cigarettes cause enormous health problems, SAM rates British American Tobacco as being the 'sustainability leader' in the tobacco sector, noting that it broke ranks with the rest of the tobacco industry by admitting that its product is addictive.

"The company is moving to reduce its negative impact on society, admittedly from a very poor starting point," says a spokesperson from SAM. "Sustainability leadership suggests that while a product like cigarettes isn't illegal, a leading company must be in the frontline of its industry's efforts to reduce the negative impact of its business on society, in a manner that's in the long-term profitable interest of the company as well as the

JARGON BUSTER

- **Ethical investing: Investment approaches that reflect the ethical preferences of the investor.**
- **Sustainability: The concept that humanity should act in a manner that doesn't undermine the options available to present and future generations.**

Where can you invest?

- **Your super fund** Most large super funds offer a sustainable option, often outsourcing the investment function to a large fund manager. You don't have to put all your eggs in one basket, though — super funds often let you divide your investments among several of their options (for example, their 'responsible' and ordinary share funds). Table 1 shows a range of well-known financial institutions' ethical or sustainable Australian share funds; the Ethical Investment Association has more info.
- **Managed funds** Most of the same investment funds and managers are available outside super. A number of specialist funds invest in areas that are considered responsible and sustainable, such as renewable energy.
- **Individual investments** You could always invest in particular shares, and in companies you believe are acting responsibly and ethically, without going through a managed fund. And some super funds allow individual share selections from ASX 200 companies.

Want more info?

- 'Responsible investment' helps people to invest in line with their values and their financial needs. As there's no single definition for what can be called 'ethical', 'sustainable', 'socially responsible' or 'socially responsive', though, it's important to do your own research when comparing funds. The Ethical Investment Association's website (eia.org.au) is a good starting point, detailing the investment strategies of ethical and sustainable funds that have been certified through its certification program.
- Another option is to get professional advice (an adviser accredited by the EIA may be able to help). Make sure your adviser is licensed by the Australian Securities and Investments Commission.
- *Ethical Investor* magazine and website (ethicalinvestor.com.au) ranks the social, environmental and corporate governance of Australian companies and investment funds. It also covers corporate governance, the ethics of mainstream investment and information on socially responsible finance products.

long-term social, environmental and economic interest of the community."

SAM also gives the example of firearms manufacturer Smith and Wesson, which introduced child locks to handguns a few years ago: "That's an example of a company evolving and leaving the dinosaurs in its sector behind."

A deeper shade of green

A few funds continue to call their products (or themselves) 'ethical', screening out companies and industries that they think fail to meet their ethical criteria, and using positive screening methods to find companies that they assess as making a positive impact on society, the environment or both.

- AUSTRALIAN ETHICAL opposes investment in uranium and excludes companies involved in areas like alcohol, tobacco and the logging of old-growth forests. It uses positive screening to find companies that it thinks make a positive impact.
- CHRISTIAN SUPER offers a choice of five 'ethical' funds. It aims to invest "in accordance with Biblical principles", screening out companies involved in gambling, tobacco, pornography, abortion drugs, embryonic stem cell research, child labour, fast food, alcohol and weapons. In some cases, the rules can be relaxed, allowing investment in companies involved in industries such as alcohol, as long as alcohol contributes less than 5% of their revenue. BHP Billiton and Rio Tinto are included, but uranium miners with poor corporate and social responsibility (CSR) performance are ruled out.
- HUNTER HALL's negative screen restricts investment in companies deriving revenues from armaments, tobacco, gambling, factory farming, destruction of the environment and uranium mining. Its ethical policy doesn't take labour standards into account, however; nor does it restrict investment in alcohol companies, companies using animal by-products, or in other types of mining. "We are of the view that mining does not necessarily cause permanent damage to the environment, provided that due attention is paid to site remediation, control of contamination, worker safety and the welfare of any nearby population," a company spokesperson says. HUNTER HALL plans to launch a deep-green fund later this year, which will use positive screening.

It's your call

There's never been (and it's unlikely there ever will be) a common acceptance of what's 'ethical', or even of which funds and companies are 'responsible' or sustainable'. You might, for example, oppose banks that charge penalty fees (which may themselves be illegal) to disadvantaged consumers, while you have no ethical issue with companies that brew beer, conduct stem cell research or mine uranium for nuclear energy.

Or perhaps none of that matters to you, but you buy into the risk-management argument that 'sustainable' companies — those showing good environmental, social and corporate governance performance — are likely to be more profitable in the long run.

Whatever your view, the bottom line is that if you want to take ethical or sustainability criteria into account when investing, you need to find out exactly where your money is going, so you can make an informed choice. Don't get caught out by the ever-changing industry jargon. You may be able to choose among 'ethical', 'sustainable', 'socially responsible', 'eco' and 'socially responsive' funds, but what counts is where their dollars are flowing, not the marketing spiel. ■

PRINCIPLES FOR RESPONSIBLE INVESTMENT

These principles were developed by an international group of institutional investors, reflecting the increasing relevance of environmental, social and corporate governance issues to investment practices. The process was convened by the United Nations Secretary-General. Details of the principles and signatories, which include Australian fund managers, are available at unpri.org.

Wax on, wax off? What's the best way to defuzz your legs for summer?

Skin and bare it

IN A NUTSHELL

- **If you've got a high pain threshold, epilators are a very easy way to keep your legs hair-free.**
- **When choosing a hair removal product, don't choose on price.**

Once upon a time, the trusty razor was most women's only tool for removing hair from their legs, but as you'll see when cruising down the personal care aisle in your supermarket, you've now got the option of waxes (both hot and cold), lotions, mousses, sprays — and the list goes on. We spend a tidy $25.6 m per annum on home hair removal products, and such a crowded supermarket shelf makes it hard to know which products give the best results. We enlisted our hardworking Home Testers and a few brave CHOICE staff to suss them out.

We sent out wax kits, wax strips, depilatories and epilators to 141 voluntarily hairy-legged trialists. We also sent a questionnaire asking them to rate the effectiveness and ease of use of each product in removing hair from the lower leg.

Our survey revealed that epilators and depilatories are much easier to use than waxes and most effective at removing hair — epilators were rated 74% and depilatories 70% overall, versus 64% and 60% for wax kits and strips. One tester said of wax strips, "Compared to shaving, this was time-consuming and less effective."

Our results also indicated that paying more for a product won't necessarily guarantee its effectiveness. Among the different types of hair removal methods tested, the least expensive product trialled received top marks.

Epilators

Epilators use a series of tiny rotating tweezers to pull out hairs. They work in a similar way to wax strips or kits but without the mess and, because they remove each hair from the root, the results should last for several weeks.

Of the people in CHOICE's trial, 40% thought epilators were either 'very' or 'moderately' painful to use, and 43% also experienced some form of skin irritation (such as redness and itching). Despite these bad points, epilators were found to be the easiest method, and were very effective at removing hair from the lower leg. The gadgets were also very speedy, most taking 10 minutes or less to use.

Epilators are more expensive to buy than depilatories and wax kits or strips, but the cost is a one-off, whereas with the other products, you're shelling out at the supermarket every few weeks.

Epilators: what to buy

See the table, right, for scores and other ratings.

BRAUN Silk-epil Xelle 5580

Price $140

This epilator fitted comfortably into most trialists' hands. It has a light designed to show hairs, and it also comes with attachments for the face and underarms/bikini line.

Trialist comments

"This was by far the best epilator [I tried] — extra features, the least painful and [has a] handy light."

"Epilator is nicely moulded to fit comfortably in the hand."

EMJOI BodyBare Ultimate AP98R

Price $140

The EMJOI has two sets of tweezers for faster hair removal and it's cordless, which is handy if you're travelling.

Trialist comments

"So much better than the epilator I usually use — I'll definitely buy one of these."

"Quick and not too painful, but nothing mind-blowing."

PHILIPS Satinelle HP2844

BEST BUY

Price $55

This epilator comes with an attachment so it can be used on delicate areas such as the bikini line and underarms.

Trialist comments

"I had no idea it was such a handy little gadget. I usually go to a salon for waxing — this is preferable."

"Compact and lightweight, which was a plus."

EPILATORS	SCORES			COST
Epilators (in rank order)*	Overall score (%)	Effectiveness score (%)	Ease of use score (%)	Price ($)
Braun Silk-epil Xelle 5580 (12)	80	80	80	140
Emjoi BodyBare Ultimate AP98R (9)	80	80	80	140
Philips Satinelle HP2844 (9)	80	80	80	55
Braun Silk-epil EverSoft 2075 (10)	70	70	80	60
Emjoi BodyBare Chic AP975 (8)	60	60	70	70

* *The number in brackets is the number of trialists for each epilator.*

Depilatories

Depilatory creams act like a chemical razor blade. They contain thioglycolate, a chemical that dissolves the protein structure of the hair, causing it to separate easily from the surface of the skin — they don't remove hair from the root as wax and epilators do. They're often smelly and messy to apply, and regrowth can be bristly. All depilatories can be irritating to the skin, so follow the instructions carefully. Don't apply them to broken or inflamed skin, and always perform a patch test before using a new product.

Our trialists tested creams, mousses and sprays and found that, overall, depilatories rated second after epilators. They were also found to be the least painful form of hair removal trialled.

Surprisingly, the cheapest product, MARZENA Hair Remover Lotion for Legs and Body, received the highest rating, while the most expensive product, ANDRÉA Extra Strength Hair Remover Lotion for the Body, was least favoured by trialists. One trialist said of the ANDREA lotion, "You need to wait about 12 minutes … to end up with a poor result, and need to repeat for decent hair removal." >

DEPILATORIES	SCORES					COST
Depilatories (in rank order)*	Overall score (%)	Effectiveness score (%)	Ease of use score (%)	Ease of application score (%)	Ease of removal score (%)	Price per 100 g ($)
Marzena Hair Remover Lotion for Legs and Body (35)	80	80	80	80	80	3.70
Veet In-shower Hair Removal Cream (33)	75	75	80	85	85	6.55
Nads Hands Free Sensitive Hair Removal Crème (34)	70	75	75	70	80	4.75
Nair Pretty Hair Removal Spray (28)	70	75	80	85	85	5.80
Sally Hansen Extra Strength Hair Remover Lotion (32)	70	75	80	85	85	5.05
Veet Hair Removal Mousse (28)	70	80	75	80	80	6.40
You'll Love Coles Hair Removal Cream (37)	65	70	70	70	70	5.50
Andrea Extra Strength Hair Remover Lotion for the Body (34)	60	65	70	80	75	11.40

* *The number in brackets is the number of trialists for each depilatory.*

PHOTOS: GENE ROSS

Depilatories: what to buy

See the table, page 21, for scores and other ratings.

MARZENA Hair Remover Lotion for Legs and Body

Price $3.70/100 g

BEST BUY

Trialist comments

"I would use this product instead of shaving or waxing. I wouldn't [have] considered using a depilatory on my legs previously, but I would use this one. Very time-efficient and effective."

"My legs felt very smooth afterwards despite the stubbornness of a few fine hairs."

VEET In-shower Hair Removal Cream

Price $6.55/100 g

Fast to use, with 32 trialists saying it took 10 minutes or less to use in the shower.

Trialist comments

"Great, although I found it annoying to have to keep my leg away from the running water."

"This was the best. Easy to use in the shower, very effective and with an excellent result. I would continue to buy this product myself."

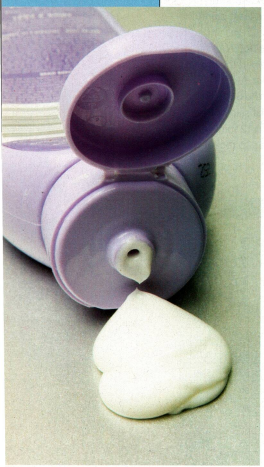
Wax kits

Wax is applied, warm or cold, to the skin in a thin layer. It's then either left to harden or a fabric strip is applied. The wax or strip is then pulled off against the direction of the hair growth, removing the hair with it.

Wax kits and strips shouldn't be used by anyone who has circulatory problems or is susceptible to infection (such as a person suffering from diabetes or an immune system disorder). Nor should wax be applied over varicose veins, moles and warts, or on irritated, chapped, sunburnt or broken skin. Test a small area first, in case you have an allergic reaction to the wax.

NAIR Salon Divine Body Wax Sensual Orchid was one of the most expensive products tested, and the one that rated lowest overall. One tester made the following comment about the product: "Used much more wax than usual; did not remove the hair. The pot had no lid so if you decided to try again, [it would be] very difficult to store."

Perhaps surprisingly, only three of CHOICE's trialists rated any of the tested products as 'very painful', with most respondents rating the kits as 'slightly painful' or 'not at all painful'.



WAX KITS	SCORES					COST
Wax kits (in rank order)*	Overall score (%)	Effectiveness score (%)	Ease of use score (%)	Ease of application score (%)	Ease of removal score (%)	Price per 100 g ($)
Veet Warm Wax Kit (25)	75	75	80	80	75	3.20
Julienne Soft Wax (23)	70	75	75	75	80	3.20
Nads Sangria Punch Natural Warm Gel (23)	70	75	75	75	80	5.95
Hot Legs Cool Hair Removal Gel Wax (23)	55	60	60	55	65	4.40
Nair Salon Divine Body Wax Sensual Orchid (25)	50	55	55	55	60	5.10

* *The number in brackets is the number of trialists for each wax kit.*

WAX STRIPS	SCORES					COST
Wax strips (in rank order)*	Overall score (%)	Effectiveness score (%)	Ease of use score (%)	Ease of application score (%)	Ease of removal score (%)	Price per strip (cents)
Nads Hair Removal Strips (23)	75	75	80	85	80	40
Veet Ready To Use Wax Strips for Normal Skin (25)	70	65	75	80	80	50
Marzena Large Wax Strips (25)	60	60	70	70	75	40
Nair Pretty Large Wax Strips (22)	60	60	75	75	75	45
Andrea Body Wax Strips (23)	40	40	55	60	65	65

* *The number in brackets is the number of trialists for each brand of wax strips.*

Wax kits: what to buy

See the table, below left, for the products' scores and other ratings.

VEET Warm Wax

Price $3.20/100 g

VEET has a handy temperature gauge on the spatula that warns you if the wax is too hot to use.

Trialist comments

"Easy to apply, excellent cotton strips and plenty of them, no pain and smooth skin."

"It glided on and came off easily."

JULIENNE Soft Wax

Price $3.20/100 g

This wax makes the claim that it's not tested on animals (to find more products like this, go to www.choosecrueltyfree.org.au).

Trialist comments

"Easy to use, not messy and did the job the first time."

"The only complaint with this wax kit is that the spatula was slightly too narrow. Otherwise this kit was excellent."

NADS Sangria Punch Natural Warm Gel

Price $5.95/100 g

Trialist comments

"Very thick. Used half a jar on one leg. Not cost-effective."

"Really smooth and easy to remove. The cloth strips are really durable and stick to the wax easily."

Wax strips

Wax strips are a lot more convenient than pot waxes — you simply pull off the backing strip and (in most cases) warm it between your hands, lay it on the skin and then rip it off, removing the hair with it. The strips come in different sizes for use on different areas of the body.

Our trialists found that for lower-leg hair removal, strip waxes aren't an effective option. They received a score of only 60% overall for effectiveness. They were also found to be the most painful form of hair removal, slightly higher than epilators in the pain stakes.

Some were better than others, however. ANDREA Body Wax Strips were the most expensive product but were rated lowest. One trialist said of them: "I found this product quite useless. Had to abandon trial due to its ineffectiveness…"

HOW WE TESTED

- 141 volunteers tested the wax kits, wax strips, depilatories and epilators. They were each sent four brands of one type of product to use and evaluate. Trialists tested two products (one on each leg) and then the two remaining products, one week later for depilatories and three weeks later for wax kits and strips and epilators.
- Trialists rated them on an 11-point scale (0–10) overall. They also rated each product's effectiveness, ease of application, ease of removal, how painful the product was to use, whether they experienced skin irritation and the time it took to use. The average score for each product was converted into a percentage.

"I burned my hand with wax"

In December 2004, Jacqueline from Sydney splashed boiling-hot wax onto her hand. She immediately rushed to hospital. "I had pretty bad burning to my right hand and was in bandages for about a month," she says.

The NSW Severe Burn Injury Service told us that in 2006, 24 people were treated for burns caused by hot wax in three major NSW hospitals. Three of these patients needed skin grafts. These burns most commonly occurred when removing a scalding-hot tub from the microwave.

The service's *Burn Injury Prevention and First Aid* brochure advises you to read the instructions carefully, heat the wax for short periods to avoid overheating and leave it to stand for three to five minutes before removing it from the microwave. If burning occurs, apply cold running water for at least 20 minutes, and seek medical attention if the burn is bigger than a 20 cent piece, if it blisters or if you have any concerns.

In 2006, 24 people were treated for burns caused by hot wax in three major NSW hospitals.

Wax strips: what to buy

See the table, left, for scores and other ratings.

NADS Hair Removal Strips

Price $0.40/strip

"Soothing and finishing" wipes may have contributed to its high ease of use score.

Trialist comments

"I have strong hair and these removed it easily. They were easy to use, left hardly any residual wax and removed most hair."

"Less need to repeat process as fine hair removed more easily. Skin softer and smoother to touch."

VEET Ready To Use Wax Strips

Price $0.50/strip

Trialist comments

"Fantastic. I would definitely use these again. I only used about ¼ pack, which for my hair was very good."

"OK for a special occasion if you had time to redo areas." ■

Cooking with cream

Light cream and light sour cream are healthier than full-fat cream — but do they work as well in cooking?

If you've ever watched Maggie and Simon whip up something fabulous in *The Cook and the Chef*, devoured Karen Martini as she dollops on the double cream in your Sunday glossy, or pored over the latest *Delicious* with Gordon Ramsay's creamy soup recipe, you may have wondered if it would all end in tears if you used light cream or extra-light sour cream as part of your healthier-eating drive.

It's all very well for celebrity chefs to trowel full-fat cream on as thick as their charm, but if you're trying to be conscious of kilojoules (and fat), lighter versions of cream and sour cream are very appealing. In CHOICE's guide to what's what in the dairy cabinet, we tell you when you can swap light or extra-light for full cream, and when only the real, full-fat thing will do.

IN A NUTSHELL

- **Light cream and light sour cream may not be as good as the real thing for cooking, as they can curdle easily. It's often less risky to use regular cream — you can cut back the fat simply by using less.**
- **Most of our tasters had no difficulty telling cream from light cream, or sour cream from light sour cream; most liked full-fat cream best, but half preferred light sour cream over the full-fat version.**

Cooking with cream

Why is it an issue? Well, both cream and sour cream are sensitive to cooking and the less fat they contain, the more this becomes a problem. The fat in cream and sour cream is in the form of tiny droplets. These droplets are surrounded by a coat of milk protein that stops them from coalescing as a lump of butter. It's the milk protein in the cream that can curdle, spoiling the appearance and texture of the finished dish — especially if the recipe also calls for lemon juice or wine.

The higher the percentage of fat in the cream, the less of a problem there is, because the bulk of the protein is then tied up around the fat droplets.

Does it curdle?

To see how difficult it can be to cook with lower-fat cream in reality, we stirred six different light creams into boiling-hot HEINZ Big Red Tomato Soup without any of them curdling — so you can be lucky. One of the products, BULLA Light Cooking Cream, claims it's "specially developed for trouble-free cooking" (the manufacturer told us it's made by a unique processing method aimed at making it perform well under cooking conditions).

However, all the light sour creams curdled, when we stirred them into the hot soup; only regular sour cream with 39% fat yielded a smooth mixture.

And never use light cream to make a chocolate ganache (a mixture of melted chocolate and cream). Light cream contains extra water, and too much water added to melted chocolate turns it into an unattractive, grainy mess.

Whipped cream for pavlova?

Can you whip light cream? Not in theory. Cream has to contain at least 30% fat to whip successfully. This is because the air bubbles created when you whip cream are coated with fat, which makes them really strong and long-lasting. If there's not enough fat, the bubbles quickly collapse. Whipping cream usually has about 35% fat and it's sometimes thickened with gelatine, which makes it easier to whip as well as helping to prevent it from turning into butter when it's whipped it for too long.

That said, we tried whipping PAULS Light Thickened Cream, which claims to be "now whippable". The manufacturer has added >

PHOTOS: GENE ROSS

Types of cream: light and thickened

Brand (in order of kJ per 100 mL)	Nutrients per 100 mL/100g: Energy (kJ)	Total fat (g)	Thickeners
CREAM			
Bulla Thickened Extra Light	568	12	Gelatine, 407, 415
Pauls Extra Lite Thickened	707	12.5	Gelatine, 407a
Pura Meadowvale Lite	766	18	407, 415, 440a
Bulla Light Cooking	775	18	407, 415, 1442
Bulla Light Thick	780	18	407, 440
Bulla Thickened Light	780	18	Gelatine, 407, 415
You'll Love Coles Lite Thickened	780	18	Gelatine, 407, 415
Pura Lite Thick	889	18	407, 440a
Pauls Light Thickened	925	20	Maltodextrin, 407, 415
Pura Meadowvale Thickened	1382	35	400
Farmers Union Pura Pure	1383	35	
Pura Meadowvale Fresh	1383	35	
Black & Gold Thickened	1387	35	407, 412
Devondale Thickened	1387	35	407, 412
Bulla Thick	1390	35	407, 440
Bulla Thickened	1390	35	Gelatine
Woolworths Fresh Thickened	1390	35	407, 412
You'll Love Coles Thickened	1390	35	Gelatine
Dairy Farmers Thickened	1434	36.5	Gelatine, 407
Bulla Pure	1740	45	
Pura Double Thick	1849	48	407
Bulla Double Thick	1850	48	407, 440
King Island Dairy Pure	2140	56	
Gippsland Dairy Pure Double	2375	60	
You'll Love Coles Double	2375	60	

Types of cream: ready-whipped and sour

Brand (in order of kJ per 100 mL)	Nutrients per 100 mL/100g: Energy (kJ)	Total fat (g)	Thickeners
READY-WHIPPED			
Dream Whip Light Whipped Dairy	908	17.5	401
Tatua Dairy Whip Lite Whipped	964	18	Maltodextrin, 407, 410
Gippsland Dairy Fresh Whipped	988	24	Gelatine
Dream Whip Whipped Dairy	1201	26	407
Tatua Dairy Whip Whipped	1220	27	401, 407
Aunt Betty's Whipped	1250	27.5	407
SOUR			
Weight Watchers Extra Light Sour	557	9.5	Gelatine
Pura Ultra Lite Sour	567	10	
Bulla Extra Light Sour	571	12	Gelatine
Pauls Extra Lite Sour	672	12.5	Gelatine
Bulla Light Sour	783	18	Gelatine
Be Light Sour Light	797	18	
Pura Sour Lite	797	18	
Woolworths Fresh Lite Sour	810	18.5	
Dairy Farmers Lite Sour	821	18.5	
You'll Love Coles Lite Sour	823	19	
Bulla Premium Sour	1378	35	Gelatine
Black & Gold Sour	1382	35	
Pura Sour	1382	35	
Farmdale Sour	1386	36	
You'll Love Coles Sour	1430	36	
Dairy Farmers Sour	1454	37	
Woolworths Fresh Sour	1550	39	
Gippsland Dairy Crème Fraiche	1640	42	

USING THE TABLE

Nutrients per 100 mL

These figures are taken from the nutrition information panel on the label.

Thickeners

These are declared in the ingredients list on the label. Most are identified by their additive number (see *Cream boosters*, page 26, for their names). You may also see other additives listed on the label; they're usually emulsifiers that help to prevent the cream from deteriorating during storage. Cream that comes in aerosol cans has nitrous oxide (laughing gas) as a propellant.

Label lingo

How cream's described on the label depends on its fat content. In the past, a product's levels of fat required it to be called 'light cream', 'cream', 'rich cream' and so on, and these labels were defined by the Food Standards Code. Now the description's at the whim of the manufacturer. Based on the products in our test, here's what the labels seem to mean.

- **Extra light** (or 'lite') 12–12.5% fat.
- **Light** (or 'lite') 18–20% fat.
- **Pure cream** 35–56% fat, without artificial thickeners.
- **Thickened cream** 35–36.5% fat, with added gelatine and/or other thickeners to give the cream a richer, creamier texture (see *Cream boosters*, page 26).
- **Single cream** Recipes calling for 'single cream' are referring to pure or thickened cream with about 35% fat.
- **Double cream** 48–60% fat.
- **Sour cream** 35–39% fat. This is cream cultured with bacteria. Lactic acid produced by these bacteria thickens the cream and gives it its characteristic tang. The same bacteria produce diacetyl, a compound that gives sour cream its rich, buttery flavour. **'Extra light'** or **'ultra light'** sour cream has 9.5–12.5% fat, and **'light'** or **'lite'** has 18–19%.
- **Crème fraiche** (42% fat) is a French version of sour cream with a higher fat content and a delicate, nutty flavour.

< maltodextrin, which helps stabilise the air bubbles. It took more effort to whip than regular whipping cream and our home economist thought the result would be too soft for a cake filling, but it would make a perfectly acceptable topping for a pavlova.

Then there's cream that squirts ready-whipped from an aerosol can. It's only good when you're serving food right there and then. We tested all the brands listed in the table on pikelets — without exception, the cream collapsed within about 10 minutes. If you want instant whipped cream that lasts well, try GIPPSLAND DAIRY Fresh Whipped Cream, which comes in a tub and looks more like cream you've whipped yourself.

CHOICE's verdict

Why risk ruining that special sauce when you can add full-fat cream or sour cream with guaranteed success? If you're worried about the level of fat, try using a little less of it than the recipe suggests. ■

The taste test

Using a top-selling brand, we asked 20 people to pick the odd one out of three samples of cream or sour cream. They didn't know whether two were light and one full-fat, or vice versa. Each then had to say whether they preferred the odd one out, or the other two.

- With cream, 19 out of 20 of our tasters correctly identified the odd one out and most preferred the full-fat cream (35% fat) over light cream (20% fat).
- With sour cream, 17 out of 20 correctly identified the odd one out, but only half preferred the full-fat sour cream (35% fat) over the light sour cream (18% fat).

The sad reality is that light cream and light sour cream don't taste quite the same as the regular full-fat versions. But the manufacturers have made them *seem* creamier by adding thickeners (see *Cream boosters*, below).

Cream boosters

Food scientists have found that increasing the thickness (or viscosity) of cream makes it seem extra-creamy without extra fat. We checked the ingredients listed on the labels and found a range of thickeners that manufacturers add to cream. Other than gelatine and maltodextrin, they're identified in the table by their additive numbers. They're all believed to be safe at the very low levels used. Here's what they are and where they come from.

- **Gelatine** is the only thickener of animal origin; it's a protein extracted from animals' skins and bones. Some brands contain 'halal gelatine'; this comes from animals other than pigs, which have been killed according to Islamic law. Cream containing gelatine wouldn't be suitable for strict vegetarians.
- **Maltodextrin** is starch (usually extracted from maize) that's been partly broken down by chemical treatment into smaller molecules.
- **Alginate** (400, 401). This is a carbohydrate extracted from specific seaweeds.
- **Carrageenan** or Irish moss (407) is extracted from different seaweeds. It's often used to thicken dairy products because of the particular way it combines with milk proteins.
- **Locust bean gum** (410) is extracted from the seeds of the locust tree (you're probably more familiar with carob, which is made from the tree's seed pods).
- **Guar gum** (412) is very like locust bean gum; it's extracted from guar beans, grown principally in India and Pakistan.
- **Xanthan gum** (415) is made from sugar fermented by specific bacteria. It's a very good thickener and stabiliser that's used in many processed foods.
- **Pectin** (440a) is the substance that makes jam set; it's extracted from fruit (usually citrus peel). Like carrageenan, it combines well with milk proteins, making it a very good thickener for cream.
- **Hydroxypropyl distarch phosphate** (1442) is made from starch, usually from tapioca or potato.

A ceiling fan looks cool and cuts costs for both you and the environment.

Fabulous fans

It might evoke the romance of a bygone era, but a ceiling fan could also be your environmentally friendly ticket to summer cool.

CHOICE tested 19 mid-priced ceiling fans (around $200–$700), from your *Casablanca*-style rattan fan to stylish stainless-steel models. Based on the amount of air they move around a room and how quiet they are, we can tell you which will work best for your living room and bedroom.

Why choose a ceiling fan?

If you live in a warm climate, chances are you need some kind of cooling device in your home to survive summer. Before you buy anything, though, it's worth heatproofing your home as much as possible. It's important to stop heat getting in: simple measures such as sealing up all the gaps around your windows and doors can make a difference. Insulating your roof space will have a major impact on heat loss and gain indoors. Blinds or curtains over the inside of windows help; external awnings are even better; and double glazing is something you can have done without major rebuilding work.

If you're renovating or building, get professional design advice about regulating temperatures naturally with smart architecture, window shading and ventilation. You could also insulate your walls.

If renovation isn't on the agenda, direct cooling devices, such as refrigerative air conditioning or an evaporative cooling system, are an option. Evaporative cooling systems are particularly effective in areas where the humidity is low, and they have lower running costs than air conditioners. Air conditioners, on the other hand, are expensive to buy and will add some serious zeros to your power bill — but they're effective in humid conditions.

If you don't want to spend big bucks, ceiling fans can offer an environmentally friendly and energy-efficient cooling solution. They won't reduce the temperature of a room but they will make your skin feel cooler. Our body's cooling system is based on the evaporation of perspiration. The air movement created by a fan increases this evaporation. So even though the room temperature and humidity levels stay the same, you'll feel cooler. If a fan has a reverse cycle, it can also be used in winter to move warmer air back down from the ceiling.

WHAT TO BUY

HUNTER Vista	$369
HUNTER Carera	$289
HUNTER PACIFIC Typhoon 316	$370
OMEGA New Yorker	$369

HOW WE TESTED

- The performance of the fans was evaluated in a room that measured 4.5 m by 4.5 m by 2.4 m high. The room had no furniture, no heat sources and flat, bare walls, floor and ceiling. Room temperature and humidity were measured before and during the tests to confirm that they were consistent for all tests.
- Testers measured the total airflow from each fan on its highest and lowest settings.
- They also measured the noise (dB) emitted when each fan was on its lowest and highest settings, using a sound level meter mounted on a tripod 1 m below the centre of the fan. Results are comparative only — what you hear will be different in different rooms.
- To evaluate ease of use, testers evaluated the quality of each fan's installation instructions, the ease of assembly, the use of the regulator (fan control), moving from one fan speed setting to another, and whether it's possible to reverse the rotational direction of the fan.

Living and sleeping

We tested fans with the living room and bedroom in mind — the key difference being that a bedroom fan should be quiet enough to let you get to sleep. We measured the noise with the fan on 'low' to correspond to use in a bedroom, and on 'high', a setting that's likely to be used in a living room for faster and more effective air circulation.

The 19 fans tested have between one and five blades. Whether it has three, four or five blades appears to make little difference to a fan's effectiveness, but the unusual single-bladed HUNTER PACIFIC Sycamore was one of the worst performers.

While most fans have blades made of wood, a few have stainless-steel blades, but this didn't affect their performance: wood- and steel-bladed fans are spread evenly through the scores. Three fans with plastic blades rated comparatively poorly, though, and the single fan that had rattan segments in its blades came bottom. Wooden blades tend to be quieter, making them more suitable for bedrooms. >

IN A NUTSHELL

- **You can get a good ceiling fan in wood or stainless steel and with three, four or five blades — there are plenty of options to match your space and taste.**
- **Ceiling fans with wooden blades are the best choice for a bedroom, because they're quieter.**

The Hunter Pacific Sycamore's unusual single-blade design, inspired by the shape of a falling seed pod, didn't enhance its performance: not only is it expensive, it's not very effective. The worst performer is the Lucci Fijian: at $269, it's essentially just a stylish ceiling adornment.

< Installing and using one

The fans on test have to be wired in by a qualified electrician or their warranties will be voided. The only exception is the ARLEC, with its J-hook, which you could, in theory, install yourself because it needs no extra wiring — but you need to have a power point in your ceiling to plug it in.

All the fans have three operating speeds. Some are regulated with a pull cord that dangles from the fan itself; this proved to be the least user-friendly option. The remote-controlled fans are the easiest to use. Wall switches are also easy to use, but they require professional installation.

Half the fans come with a light fitting, and combining these elements can be a good idea. If you rely on an existing light fitting mounted above the fan, you could end up with a strobe lighting effect. ■

profiles

HUNTER FAN CO.

HUNTER Vista
Blades 5 wooden
Price $369
This fan was the top scorer by quite a margin. It's quiet and works extremely well in both a living room and a bedroom setting. It also has an integrated light.

While most of the HUNTER fans were fairly difficult to assemble, the Vista was among the easiest because it has a locking system for attaching the blades, and clearer instructions. It comes with a pull cord, or you can opt for a remote or wall switch. On the downside, the fan speed labelling is difficult to read because of the light fixture.

HUNTER Carera
Blades 3 wooden
Price $289
The HUNTER Carera is the cheapest of the four fans we recommend. It's also very effective at moving air on its lowest setting and so is a particularly good choice for a bedroom. It doesn't come with an integrated light fitting but you can opt for one. It comes with a pull cord but you can also choose a remote or a wall switch. On the downside, it's the most difficult fan to assemble.

PRODUCT	PERFORMANCE						FEATURES	SPECIFICATIONS			
Brand / model (in rank order)	Overall score (%)	Ease of use score (%)	Living room score (%)	Bedroom score (%)	Noise on low	Noise on high	Fan balance kit supplied	Fan blade material	Blades	Integrated light	Fan and light control
Hunter Vista	83	68	91	83	Quieter	Quieter	✓	Wood	5	2 x 60 W bulbs	Pull cord (B
Hunter Carera	77	68	69	90	Medium	Quieter	✓	Wood	3	Optional	Pull cord (B
Hunter Pacific Typhoon 316	76	67	94	62	Quieter	Noisier	✓	Stainless steel	4	1 x 100 W (optional)	Wall switch
Omega New Yorker	76	94	74	68	Quieter	Quieter	✓	Wood	5	2 x 60 W bulbs	Remote
Cinni White Birch	71	47	87	66	Quieter	Noisier		Steel	4		Wall switch
Hunter Salinas	70	70	70	70	Medium	Quieter	✓	Wood	5	Optional	Pull cord (B
Hunter Pacific Penta	68	73	70	64	Quieter	Quieter		Wood	5	2 x 75 W (optional)	Pull cord (B
Hunter Savoy	68	69	62	73	Quieter	Quieter	✓	Wood	5	Optional	Pull cord (B
Hunter Industrie II	67	54	69	72	Quieter	Quieter	✓	Wood	3	Optional	Wall switch
Hunter Lemoyne	67	71	59	72	Medium	Quieter	✓	Wood	5	3 x 60 W bulbs	Pull cord (B
Omega Seattle	67	94	55	66	Medium	Quieter	✓	Wood	3	1 x 100 W bulb	Remote
Cinni Polished Shine	65	50	79	59	Noisier	Noisier		Stainless steel	3		Wall switch
Lucci Futura 52	65	78	59	65	Quieter	Quieter	✓	Wood	4	1 x 100 W bulb	Wall switch
Hunter Pacific Concept 2	64	70	54	70	Medium	Quieter	✓	Wood	4	Optional	Wall switch
Hunter Pacific Kinetic	63	55	65	65	Medium	Quieter		Wood	4	1 x 100 W (optional)	Wall switch
Arlec	61	60	54	69	Medium	Quieter	✓	Plastic	5	2 x 40 W bulbs	Pull cord
Design Craft Harbor (A)	60	72	64	50	Quieter	Quieter		Plastic	5	1 x 60 W bulb	Pull cord
Hunter Pacific Sycamore	48	43	47	51	Medium	Quieter		Plastic	1		Wall switch
Lucci Fijian	28	74	13	21	Quieter	Medium		Rattan / steel	5		Wall switch

HUNTER PACIFIC Typhoon 316
Blades 4 stainless steel
Price $370
The Typhoon generated the most airflow and performed exceptionally well on a living room setting, but may be a bit noisy for a bedroom on its highest setting. It's operated via a wall switch and has an optional integrated light fitting. However, it suffers from excessive vibration.

OMEGA New Yorker
Blades 5 wooden
Price $369
This fan, which comes with a remote control, scored equal highest (with the OMEGA Seattle) for ease of use. It has an integrated light and is quiet and effective on both low and high settings. Its diameter (1300 mm) is the equal smallest of all the ceiling fans tested, so it could be suitable for a smaller room.

about the rest

The models in the *What to buy* list give a good range of choices among blade material, number of blades, type of controls, etc. However, you might like the looks of one of the other models in the top half of the table that has a good score for the kind of room you want to use it in, so here are a few observations about some models.

- Despite having no instructions, the CINNI White Birch is the easiest to assemble and would work well in a living room.
- The HUNTER Salinas got good scores for both bedroom and living room settings, though there are better performers for each of these rooms individually.
- The DESIGN CRAFT Harbor and ARLEC fans can be installed outside your house.
- The HUNTER PACIFIC Sycamore's unusual single-blade design was inspired by the shape of a falling seed pod, but that didn't enhance its performance. Not only is it very expensive ($600), it's not very effective.
- The HUNTER PACIFIC Sycamore and the ARLEC are the only fans you can't reverse to move warm air downwards in winter.
- The worst performer is the LUCCI Fijian — the only fan made of steel with rattan inserts. At $269, it's essentially just a stylish ceiling adornment.

How to reverse	Ceiling fixture type	Recommended min. fan height from floor (m)	Contact	Price ($)
Switch on boss	Metal plate	2.3	www.hunterfan.com.au	369
Switch on boss	Metal plate	2.3	www.hunterfan.com.au	289
Switch on boss	Metal bracket	2.1	www.hunterpacific.com.au	370
Remote control	Metal plate	2.1	www.omega-australia.com	369
Switch on boss	Metal bracket	2.3	www.cinni.com.au	299
Switch on boss	Metal plate	2.3	www.hunterfan.com.au	399
Switch on boss	Metal bracket	2.1	www.hunterpacific.com.au	320
Switch on boss	Metal plate	2.3	www.hunterfan.com.au	299
Switch on boss	Metal plate	2.3	www.hunterfan.com.au	329
Switch on boss	Metal plate	2.3	www.hunterfan.com.au	329
Remote control	Metal plate	2.1	www.omega-australia.com	299
Switch on boss	Metal bracket	2.3	www.cinni.com.au	459
Switch on boss	Metal bracket	2.1	www.beaconlighting.com.au	199
Switch on boss	Metal bracket	2.1	www.hunterpacific.com.au	289
Switch on boss	Metal bracket	2.1	www.hunterpacific.com.au	430
na	J-hook	2.1	www.arlec.com.au	243
Switch on boss	Metal plate	2.3	www.hunterfan.com.au	219
na	Metal bracket	2.1	www.hunterpacific.com.au	600
Switch on boss	Metal bracket	2.1	www.beaconlighting.com.au	269

USING THE TABLE

Scores The overall score is made up of:

- Ease of use: 20%
- Living room performance: 40%
- Bedroom performance: 40%

Living room performance scores the ability of the fan to move air at high speed, a setting that's more likely to be used in a larger area during the day, and that's also likely to be noisier.

Bedroom performance scores the ability of the fan to move air at its lowest setting — the setting most likely to be used at night, when a quiet environment is important for a good night's sleep.

Noise levels were measured on each fan's lowest and highest settings.

Fan balance kit This can help correct any wobbles, which can otherwise rob a fan of efficiency and lead to extra noise during its operation.

Fan control Options include a pull cord control on the bottom of the fan, a wall switch that replaces the light switch if the fan has a light, or a remote control.

Reversing the direction of the fan draws air upwards rather than downwards, helping move warm air around in winter without creating a downward breeze in the room.

Ceiling fixture type A J-hook makes installation a little easier but can only be installed on a flat ceiling. Fans with a metal bracket or plate can be installed on both flat ceilings and those with a slight slope.

Minimum fan height from the floor needs to be 2.1 m or 2.3 m, depending on the model you choose. This means your ceiling would need to be at least 2.4–2.6 m high. If your ceiling is significantly higher than this, you may need an extension rod to lower the fan to an optimal operation level.

Price Recommended retail, as of September 2007.

na Not applicable — can't be reversed.
(A) Discontinued, but may still be available in some shops.
(B) The tested version had a pull cord, but you can opt for a remote control or wall switch instead.

Four the merrier?

They may not have the street cred of their three-wheeled cousins, but the results for the four-wheel strollers in this test confirm there's no shame in transporting your pride and joy on four wheels — in fact, it could be safer.

CHOICE tested 12 strollers, priced from $129 to $1900, for safety, durability and ease of use — and, in contrast to many previous strollers we've tested, most were just fine. Ten out of the 12 strollers passed all safety tests in accordance with the Australian/NZ standard. In our three-wheel stroller test back in April 2007, five out of 11 failed. Maybe CHOICE's safety message is finally getting across to manufacturers.

All but one of the four-wheel strollers also passed our durability tests — another good result. However, these results can't be compared directly with those for the three-wheelers, as they were tested at jogging speed. >

IN A NUTSHELL

- **Only two of the four-wheeled strollers tested failed a safety test — five three-wheelers failed one in our last stroller test.**
- **Only one four-wheel stroller failed our durability test.**
- **One stroller on test — the Stokke — cost $1900, but proved one of the hardest to use.**

USING THE TABLE

Safety and durability tests A stroller can only pass or fail these tests.

Ease of use score This is made up of:

- Various adjustments: 25%
- Various applications: 25%
- Manoeuvring: 25%
- Folding, unfolding and carrying: 25%

Price Prices are recommended retail, as of July 2007.

ns Not stated.
** Including supplied accessories, rounded to the nearest 0.1 kg.*
*** Maximum dimensions when in use, rounded up to the next cm.*
(A) Discontinued, but may still be available in some shops.
(B) The entire seat reclines in two forward-facing and three rear-facing positions.
(C) The front wheels have individual brakes.
(D) Baby capsule 9 kg; seat 15 kg.
(E) Price includes 'baby bag' capsule.

what to buy

These five strollers passed all the safety and durability te

LOVE N CARE
Delta BP2750
Price $249

Good points

- Has the equal-highest ease of use score (75%).
- The handle can be reversed, so the baby can face you instead of looking straight ahead.
- Has linked rear brakes that are operated in one movement.
- Has a boot (leg) cover.

Bad points

- The rear wheels stick out to the sides and are prone to bumping.
- The second-heaviest stroller.

PRODUCT	RESULTS			FEATURES						
Brand / model	Passed all our safety tests	Passed all our durability tests	Ease of use score (%)	Reversible handle / seat direction	Pocket	Legrest positions	Backrest positions	Adjustable handle height	Front bar or tray	Rear brakes
Love n Care Delta BP2750 (A)	✓	✓	75	Handle	✓	2	4		Bar	Linked (C)
Childcare Pulsa 011005	✓	✓	65		✓	2	5			Individual
Graco Mosaic (A)	✓	✓	65		✓	2	Variable	✓	Bar	Linked
Poco a Poco Volante Plus 1316B	✓	✓	65			2	4		Bar	Individual
Valco Baby Titan N6937	✓	✓	65		✓	4	5			Individual
Infa Aspen	✓	✓	60			3	4		Tray	Linked
Maclaren Techno XT A071531	✓	✓	60		✓	2	4	✓		Individual
Steelcraft Profile 36733	✓	✓	60		✓	2	4		Bar	Individual
Stokke Xplory and Xplory Baby Bag	✓	✓	60	Seat	✓	1	(B)	✓	Bar	Linked
Bébé Care Centaur 011018	✓		60		✓	2	5		Bar	Individual
Swallow Way To Go		✓	75		✓	1	5		Tray	Linked
Chicco CT 0.4		✓	65		✓	2	5			Linked

I received the highest ease of use scores. The LOVE N CARE scored particularly well for this, at 75%.

CHILDCARE Pulsa 011005
Price $150
Good points
- Has a rain cover and a sun cover.

Bad points
- Has no front bar or tray.

GRACO Mosiac
Price $199
Good points
- The height of the shoulder straps on the backrest is adjustable.
- Has linked rear brakes that are operated in one movement.

Bad points
- Harness straps are difficult to adjust.

POCO A POCO Volante Plus 1316B
Price $129
Good points
- The lightest stroller tested.
- Has a rain cover.
- The cheapest stroller in the test.

Bad points
- No pocket.

VALCO BABY Titan N6937
Price $169
Good points
- The second-lightest stroller tested.

Bad points
- Has no front bar or tray.

PHOTOS: GENE ROSS

SPECIFICATIONS

Maximum recommended weight of child (kg)	Bottom basket capacity (kg)	Stroller weight (kg)*	Dimensions (cm. H x W x D)**	Contact	Price ($)
ns	ns	10.9	105 x 64 x 106	www.lovencare.com.au	249
17	5	8.8	106 x 47 x 91	www.childcareproducts.com.au	150
15	5	8.4	106 x 51 x 89	03 8787 3838	199
18	3	7.3	106 x 48 x 86	03 9764 3333	129
18	5	7.7	107 x 52 x 88	www.valco.com.au	169
18	ns	10.1	106 x 54 x 98	02 4728 8000	228
25	2	8.2	108 x 47 x 90	www.childcareproducts.com.au	470
17	4	8.7	105 x 50 x 90	www.britax.com.au	159
(D)	2	12.6	116 x 56 x 108	1800 350 078	1900 (E)
17	3	8.8	106 x 50 x 86	www.childcareproducts.com.au	170
18	5	8.6	102 x 54 x 95	03 9764 3333	149
15	3	10.1	101 x 60 x97	02 8543 5570	270

about the rest

- The INFA Aspen, MACLAREN Techno XT, STEELCRAFT Profile and STOKKE Xplory all scored only 60% for ease of use. The INFA has no pocket and the MACLAREN no front bar or tray. For more info on the STOKKE Xplory, see *Stroller of the future?*, page 32.
- During testing of the BÉBÉ CARE Centaur, both bolts on the front support broke, causing it to fail the durability test. The replacement bolts lasted the remainder of the test.
- The SWALLOW Way To Go failed one safety test — the opening underneath the tray is obstructed by a drink holder on one side, which means a child's head could become trapped if they weren't strapped in, and slid forward.
- The CHICCO CT 0.4 failed one safety test — the head barrier at the rear isn't effective enough to prevent a child from accidentally slipping through when the seat back is reclined.

Four-wheelers, on the whole, are more compact, easier to fit into a car boot and not quite as wide as three-wheeled strollers, which makes them easier to fit through narrow doorways and negotiate down supermarket aisles.

THE NEW STANDARD FOR STROLLERS

Following the deaths of two babies in separate stroller incidents, the Federal Government announced a new mandatory consumer product safety standard for strollers, which will take effect on 1 July 2008.

The new standard is based on the voluntary Australian/NZ standard, with some modifications:

- **All strollers must have a wrist tether strap ('leash'), to prevent the stroller from rolling away.**
- **The stroller harness will require only waist and crotch straps (to be in line with the US and European standards). CHOICE thinks the current five-point harness provides better safety.**
- **Brakes will be coloured red for better visibility (which won't work as well on red strollers, of course).**

< Four wheels safer?

A poll on the CHOICE website asked parents to identify any safety problems they'd encountered with their three- or four-wheel strollers. Of the 133 people who responded, and who own or previously owned a four-wheel stroller, only 41% had ever experienced a problem with it. Of the 216 respondents who own or previously owned a three-wheeler, 63% had encountered problems with it. The most common was tipping dangerously or toppling over with a child inside (21%). For four-wheel strollers, only 13% had had the same problem. Of three-wheeler owners, 14% also said the stroller had rolled away unexpectedly when not held, compared to only 4% of four-wheeler owners.

For manoeuvrability, style and the flexibility of being able to jog with your stroller (although some manufacturers are now backing away from recommending this), a three-wheeler is a good option. However, their increased manoeuvrability can make three-wheel strollers more prone to rolling away.

They can also be less stable than their four-wheel counterparts, and more prone to tipping.

Four-wheelers, on the whole, are more compact, easier to fit into a car boot and not quite as wide as three-wheelers, which makes it easier to fit them through narrow doorways and down supermarket aisles. Some also come with a reversible handle or seat, so you have the choice of whether the baby sits facing you or looking straight ahead. (The LOVE N CARE Delta and STOKKE Xplory in this test have this feature.)

Regardless of the stroller you choose, it's important to keep the following in mind:

- Never leave your child unattended in a stroller.
- Always engage the brake when the stroller is standing, to prevent it from rolling.
- When at a train station, park the stroller with its wheels parallel to the tracks.
- Use a leash or wrist tether strap to keep the stroller attached to you.
- To ensure the stroller doesn't tip over, don't hang heavy bags from the handles. ■

Stroller of the future?

If you saw a STOKKE Xplory on the street, you'd probably wonder if you'd stepped onto the set of the latest *Star Wars* film, but no, it's the latest high-tech stroller from Norway. The Xplory boasts being the only stroller that elevates your child closer to you and "strengthens your child's feelings of well-being, making them feel happy, safe, and assured". It also puts less pressure on mum's or dad's back, as there's no need to bend or lean over when attending to the child. You can buy an optional 'baby bag', which is a capsule used for transporting a baby under 9 kg, for $440. The stroller and baby bag can be bought separately but are cheaper as a package.

While the Xplory passed safety and durability tests and is very easy to manoeuvre, it scored just 60% for ease of use, as the stroller is bulky and heavy to lift, the footrest is tricky to adjust (to us, it seemed to need more than two hands), and operating the release levers for folding it requires a certain technique, otherwise you can damage it (as our tester did with the first one we bought). We advise asking to be shown how to operate, fold and unfold the stroller when you buy it.

Russell Crowe and Danielle Spencer have been pushing their tot around in an Xplory, but with its $1900 price tag (capsule included), you'd almost need to be on their income to afford one.

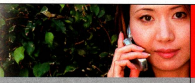
PAUL SANTELMANN

HOW WE TESTED

- To test safety, based on the Australian standard, our testers checked that the harness straps on each stroller are adjustable and of adequate strength and length; that the child is securely restrained; and that there are no sharp edges or possible entrapment points for fingers or limbs. They also tested the stability of each stroller, and whether the brakes worked well.
- To assess ease of use, our testers checked adjustments, such as reclining functions and the safety harness; and various activities, such as loading and unloading the basket and using the brakes. They also folded and unfolded the strollers; took them over rough terrain, up and down stairs and through doorways; and tested how easily each fits into the boot of a family-sized car.
- To test durability, our testers put each of the strollers on our 'rolling road' rig for 64 hours at a speed of 5 km/h. They also attached each of them to a machine that continuously simulates the action of mounting a kerb. In both cases, the idea is to find out whether anything breaks, falls off or stops working properly after consistent use.

Mobile phones have played music and taken photos for some time, just not very well … until now.

Is it good to be 3?



Some models in our latest round-up are finally beginning to deliver on the earlier promise of a true multimedia mobile, and the rise of 3G may have contributed. Almost half the phones in CHOICE's latest test can take photos at 2 megapixels or more, compared to just one fifth of the models in the previous test. For the first time, we've also included a score for music, reflecting the importance of this feature for many mobile phone buyers.

But don't go for all the bells and whistles if you won't use them. The phone that rated highest for picture quality (SONY ERICSSON K800i) scored only 54% in the music department, while one of the best MP3 music phones we've ever tested (SONY ERICSSON W950i) has no camera at all.

Work out what features you want from your phone and choose one that fits your lifestyle.

Network update

If you want an all-singing, all-dancing mobile, the 3G network delivers more multimedia features than the older GSM network, and with providers such as Optus, Telstra, 3 and Vodafone on board, competition for your dollar is fierce. The range of models is also improving, with one third of the models in the table (page 36) compatible with 3G networks. All phones that support 3G are also compatible with local GSM mobile networks.

Currently, however, the full functionality of 3G (such as video calls and access to premium content) is available only in capital cities and coastal regions with large concentrations of people.

In the past, mobile phone owners living in remote areas often opted for CDMA phones because of their wider coverage compared to GSM phones. Now, however, Telstra is the only network provider for CDMA customers, since 3 (formerly Orange) recently pulled out of providing this service and moved customers over to its 3G network.

Telstra's Next G network, not to be confused with its 3G service, operates on a different network frequency and offers the widest coverage, servicing 98% of the population, including much of the network coverage previously serviced by CDMA. None of the phones in this test works on the Next G network, but we'll be looking at some Next G models in future tests. >

IN A NUTSHELL

- **The number of models supporting the new 3G network is on the increase, which means a truly multimedia mobile may finally be here.**
- **Don't pay for features you won't use; some phones are great for photos, for example, but lousy at playing music — and vice versa. The *What to buy* list, page 34, picks out the best for different users.**

HOW WE TESTED

Our testers checked the following aspects to put together each phone's overall score.

- **Battery** This is based mainly on the time-in-use result (see the table, pages 36–37) but testers also considered the charging time and battery status indication.
- **Sensitivity** They measured the phones' receiving sensitivity and sending power (particularly important in areas with poor network coverage) in both the 900 MHz and 1800 MHz bands.
- **Everyday use/ergonomics/SMS** A user panel assessed each phone's instruction manual; everyday use (such as ease of answering a call, storing a number in memory and dialling a number stored in memory); ergonomic features (such as ease of using the keys and menus); SMS use (writing and receiving an SMS, and the suitability of each phone's display for SMSing).
- **Sound quality** For both incoming and outgoing calls, testers carried out a number of acoustic measurements, such as frequency response. In addition, a user panel rated the sound quality of calls.
- **Music quality** Our testers measured the ability of the phone to perform as a music player.
- **Picture quality** For phones with a camera, they assessed its display quality, and the transfer and storage of pictures.

Note: If a phone doesn't have a camera or can't play music, the scores for those aspects aren't zero; instead, the weighting for those scores is distributed evenly across the other scores.

- **Versatility** Testers checked each phone against a list of features and functions, and assessed its suitability as a mobile office and for fun and games.
- **Portability** Among other things, they assessed the weight and size of the phones, and the ease with which their keypads can be locked and unlocked.
- **Durability**

Shock resistance Testers put the phones in an 80 cm diameter barrel that was then turned, simulating falls from, say, a table, or out of a shirt pocket. After five, 15 and 25 turns, the phones were checked for damage. There was a maximum of 50 falls. This is a fairly severe test.

Water resistance Testers stored the phones in hot, damp conditions, and carried out a rain test.

Workmanship An assessment was made of the build quality of the phones.

In the past, mobile phone users living in remote areas often opted for CDMA phones because of their wider coverage compared to GSM. Telstra's Next G network now offers the widest coverage, servicing 98% of the population.

< All the phones in the table work on the Australian digital GSM networks from Telstra, Optus and Vodafone. As GSM is also widely used overseas, chances are you can use your mobile when travelling. You can do this in various ways. If you use your normal network provider, for example, it's called roaming, and you'll need to check which countries your provider has roaming agreements with, and what the call charges are. Sometimes it's cheaper to buy a new SIM card for the country you're visiting when you arrive.

All the models tested are at least dual-band, which means they can operate on both the 900 and 1800 MHz GSM bands that are used in Australia and many overseas countries. Tri-band and quad-band models support more countries and are particularly useful if you travel more widely. (All but the NOKIA 1110i, 1112, 1600 and 5200 are at least tri-band.) >

what to look for

Features (almost) all the tested models have

- Optional vibration alert instead of ringing.
- Keypad locking.
- SMS texting.
- Rechargeable Li-Ion battery.
- Colour display (except the NOKIA 1110i, 1112 and MOTOROLA F3).
- Internal antenna.
- Alarm.
- Polyphonic ring tones.
- SMS memory in the phone in addition to that on the SIM card, so you can save additional messages (except the MOTOROLA F3).
- Allows you to store additional phone numbers and an email address for your contacts (except the MOTOROLA F3).
- Calendar with reminder function (except the MOTOROLA F3).
- GPRS (except the NOKIA 1110i, 1112, 1600 and MOTOROLA F3): This stands for 'general packet radio service' — it allows you access to

what to buy

Best overall

SONY ERICSSON W880i (3G/GSM)

Price $899

This extremely light phone is a solid all-round performer, with a crisp high-resolution screen. Although there's no FM radio, the music player is easy to use and you can add a set of stereo Bluetooth or standard headphones to improve the listening experience.

The 2 megapixel camera takes photos good enough for a postcard-sized print, and it's easy to transfer the photos to a PC. You can also connect the phone to your PC as a removable drive through the USB connection.

Best with bells and whistles

SONY ERICSSON W850i (3G/GSM)

Price $699

Perfect for music lovers, this slider phone is also one of the most versatile in the test, with good sound quality, stereo Bluetooth support and a long talk time. Two camera lenses, one for photos and another for video conferencing, give you lots of picture-taking options.

Use the USB connection to transfer your files from the phone to a PC, or use the phone as a removable drive.

This phone may not take as much punishment as some of the other phones in the table, however, and the control keys take a little getting used to.

Best basic mobile

NOKIA 6085 (GSM)

Price $249

This reasonably priced clam-shell phone does all the basics well, with good SMS performance.

Multimedia features include recording and playback of video from the removable micro SD card, and a camera that produces images good enough for sharing, either on a screen or via email.

Headphones aren't included, but Bluetooth stereo gives you the option of listening to music from the removable card or FM radio, using a set or wired or wireless stereo headphones.

Best for music

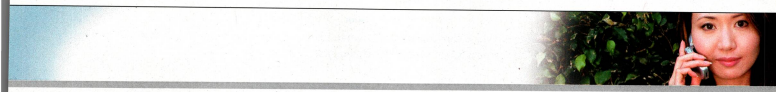
SONY ERICSSON W950i (3G/GSM)

Price $1099

Maybe this device should be called a music player that performs well as a mobile phone. It has 4 GB of internal memory (enough to store more than 1000 songs) and dedicated controls for searching and selecting music tracks. A volume dial instead of the standard tiny buttons rounds out the W950i nicely.

An impressive one-hour battery recharge also means you can quickly get back to your music.

However, this phone has no camera — but this leaves more room for a large, high-resolution touchscreen display that also allows you to see your SMS messages easily.



various web-like applications available over the mobile network.

- MMS compatible: This allows you to send and receive messages with photos and/or sound (except the NOKIA 1110i, 1112, 1600, 2310 and MOTOROLA F3).
- Hands-free use (except the MOTOROLA W220 and LG phones): A speakerphone on the mobile allows you to make a call without holding the handset to your ear.

Features in the table

- If you want to use your phone as a mobile office, look for a model with an IR (infrared) port for easy data transfer to your computer, and email reading and sending capabilities.
- A USB connection of any type also lets you transfer files to your computer. Some models use a mini USB connection and can have the phone appear on the PC as a removable drive.
- Bluetooth — a wireless radio technology that allows a range of electronic devices, such as mobile phones, mobile phone car kits, computers and PDAs, to communicate with each other easily over a range up to 10 metres. A recent version of Bluetooth (A2DP) allows you to listen to your music without cables via a pair of Bluetooth stereo headphones. Of the top 10 overall performers in this latest test, the NOKIA 6233 is the only one that doesn't support Bluetooth stereo headphones.
- Flight mode is a handy feature for air travellers, as you can turn your phone functionality off but still be able to use your mobile as a music player.
- If you like to listen to music on the go, look for a model with a built-in FM radio and/or MP3 player. Most phones with these functions provide a headset. If not, check the table to see if the phone has a standard stereo jack so you can use your own headphones.
- A memory card allows you to store photos and video clips and transfer them to a computer or printer. Not all the phones with a memory card slot provide a card, so you may have to buy one separately. Check to see the exact type of memory you'll need, as the cards are all tiny and look very similar but aren't interchangeable.

Best for photography

SONY ERICSSON K800i (3G/GSM)

Price $699

This phone is just as comfortable taking photos as taking calls. The camera has two lenses: a 3.1 megapixel resolution lens for higher-quality photos and a second lens for video calls. The K800i also has a real flash, for capturing images in less-than-perfect lighting conditions.

Moving files to and from the PC is easy using the supplied USB cable, and a Micro memory stick slot is available for added storage.

Stereo Bluetooth support, FM radio and a flight mode also make this phone a useful MP3 player, although the overall sound and music quality is middle of the road.

Best for business

NOKIA N93i (3G/GSM)

Price $1429

An unusual design, this clamshell-type mobile is substantial in size (and price) and has a strong set of features that includes two built-in digital cameras: a 3.2 megapixel resolution camera with 3x optical zoom for photos, and a second camera for video calls.

WiFi support allows you to use the phone to browse the web, in much the same way as a notebook computer connects wirelessly to a router or internet access point.

We put all the phones through a fairly rigorous procedure to test durability, and the N93i was the only model to fail the first time. However, two additional test samples passed without further incident.

Good for business

NOKIA E65 (3G/GSM)

Price $789

This slider phone has a voice-dialling feature: it doesn't need voice tags — you just say the name and if it's in your address book, the phone will make the call.

The WiFi and VoIP features on this phone make it a useful tool for anyone with a broadband connection and a wireless router. The camera's picture quality is also among the best in the table, despite having only 2 megapixels resolution.

PHOTOS: ICIT

USING THE TABLE (OVERLEAF)

Scores The overall score is a combination of the following scores:

- Battery life: 17.5%
- Sensitivity: 12%
- Everyday use: 9%
- Ergonomics: 5.25%
- SMS: 10%
- Sound quality: 9%
- Music quality: 5%
- Picture quality: 10%
- Versatility: 10%
- Portability: 7%
- Durability: 5.25%

Time in use Testers continuously drained the batteries under various conditions in a network simulator. The time listed in this column is the average of all the tested scenarios.

Standby time A measurement of how long it takes for the phone's battery to drain when it's turned on and taking no calls.

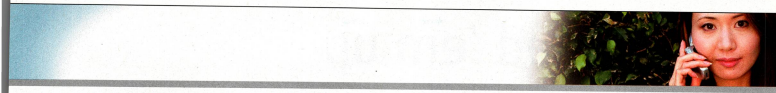
Features See *Features in the table*, above, for an explanation of these.

Camera resolution As a comparison, new standalone digital cameras have a resolution of at least 3 megapixels.

Price are recommended retail, as of July 2007.

A memory card allows you to store photos and video clips and transfer them to a computer or printer. Check the exact type of memory you'll need, as the cards are all tiny and look very similar, but aren't interchangeable.

PRODUCT		PERFORMANCE													
Brand / model (in rank order)	3G	Overall score (%)	Battery score (%)	Sensitivity score (%)	Everyday use score (%)	Ergonomics score (%)	SMS score (%)	Sound quality score (%)	Music quality score (%)	Picture quality score (%)	Versatility score (%)	Portability score (%)	Durability score (%)	Time in use (hours)
Sony Ericsson W880i	✓	69	76	73	62	62	64	60	67	62	72	84	65	8.07
Sony Ericsson W850i	✓	68	82	76	68	53	64	63	66	60	78	54	55	8.42
Motorola Z3 Motorizer		67	73	75	67	47	59	69	43	60	73	65	89	6.91
Nokia 5300 Xpress Music		67	57	76	78	55	76	57	66	60	84	59	64	4.47
Nokia 6085		67	81	73	80	55	70	69	46	34	69	61	76	5.77
Nokia 6151	✓	67	74	74	80	61	70	63	49	57	65	64	60	6.17
Nokia 6233	✓	67	73	74	80	62	68	63	50	60	66	64	59	6.03
Nokia 6288	✓	67	61	78	80	59	75	63	37	66	79	51	64	6.39
Sony Ericsson K550i		67	77	73	61	65	64	64	60	59	66	70	65	6.53
Sony Ericsson W950i	✓	67	72	76	45	53	81	66	69	na	64	58	68	6.07
Motorola Motokrzr		66	71	80	65	53	49	68	49	55	73	71	78	6.75
Nokia 6070		66	79	78	79	69	73	59	na	25	54	72	65	6.49
Nokia 6234	✓	66	73	74	68	63	68	50	49	61	69	67	59	6.05
Nokia 6300		66	61	76	75	59	68	56	40	65	72	74	64	4.48
Nokia E65	✓	66	71	74	62	50	63	61	56	69	73	60	71	5.56
Sony Ericsson W810i		66	82	69	57	66	53	58	62	60	71	63	62	5.93
Sony Ericsson Z610i	✓	66	76	74	66	50	59	64	na	56	65	60	77	8.36
Nokia N73	✓	65	76	67	63	61	63	63	47	70	65	49	62	6.28
Nokia N93i	✓	65	74	72	64	43	63	66	53	66	75	27	82	5.46
Sony Ericsson / Vodafone V630i	✓	65	71	71	64	66	59	66	60	40	74	71	62	8.10
Nokia 6080		64	75	77	75	64	69	59	na	26	54	69	65	6.04
Sony Ericsson K800i	✓	64	71	74	53	60	60	59	54	75	66	56	59	7.75
Sony Ericsson W300i		64	80	76	58	55	50	68	60	30	69	65	82	6.07
Sony Ericsson Z530i		64	87	74	58	53	50	65	nt	30	59	65	80	8.55
Sony Ericsson Z550i		64	72	74	56	52	58	65	50	53	57	71	82	6.91
Motorola W220		63	81	82	63	53	33	66	na	na	26	76	80	7.93
Nokia 1600		63	90	74	60	53	45	60	na	na	22	76	58	9.16
Nokia 5200		63	68	76	77	50	74	57	55	35	64	60	61	4.47
Samsung SGH-E900		63	58	78	77	54	51	67	38	55	63	77	64	5.14
Nokia 1110i		62	80	73	62	56	51	59	na	na	21	77	60	6.30
Nokia 5500 Sport		62	62	75	66	57	55	64	40	59	60	62	69	4.60
Samsung SGH-C300		62	62	81	75	46	52	66	na	na	36	69	72	6.51
Sony Ericsson K610i	✓	62	71	69	53	62	55	62	na	59	64	72	30	8.11
Nokia 1112		61	85	73	56	53	41	59	na	na	21	77	60	6.30
Samsung SGH-E250		61	53	70	84	64	58	66	43	31	64	77	70	5.36
LG KG220		54	58	73	54	54	32	68	na	20	35	84	74	6.15
Motorola F3 Motofone		54	70	81	59	45	4	68	na	na	12	82	57	6.43



Standby time (days)	Battery charging time (minutes)	FEATURES												SPECIFICATIONS			
		IR port	Mini USB port	Email	Bluetooth	Bluetooth stereo	Flight mode	FM radio	MP3 player	Headset supplied	Standard stereo jack	Memory card slot		Weight (g)	Dimensions	Camera resolution (megapixels)	Price ($)
12.3	150			✓	✓	✓	✓		✓	✓	✓	MS Micro		71	103 x 47 x 11	2.0	899
12.2	120	✓		✓	✓	✓	✓	✓	✓	✓	✓	MS Pro Duo		117	99 x 47 x 22	2.0	699
14.2	115		✓	✓	✓	✓	✓		✓	✓		Micro-SD		109	105 x 46 x 17	2.0	529
8.2	170	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro-SD		107	93 x 49 x 22	1.3	429
13.8	195			✓	✓	✓	✓	✓	✓			Micro-SD		107	92 x 47 x 24	0.3	249
12.3	95	✓			✓	✓	✓	✓	✓			Micro-SD		100	109 x 48 x 20	1.3	379
9.6	100	✓			✓		✓	✓	✓	✓		Micro-SD		111	109 x 47 x 19	2.0	489
13.1	110	✓		✓	✓	✓	✓	✓	✓	✓		Mini-SD		119	99 x 47 x 23	2.0	499
13.9	150	✓		✓	✓	✓	✓	✓	✓	✓		MS Micro		95	102 x 47 x 17	2.0	449
10.7	60	✓		✓	✓	✓	✓	✓	✓	✓	✓			113	107 x 56 x 16	na	1099
14.6	105		✓	✓	✓	✓	✓		✓	✓		Micro-SD		102	103 x 43 x 17	2.0	630
14.0	130	✓		✓				✓						92	105 x 45 x 19	0.3	239
9.6	100	✓		✓	✓		✓	✓	✓	✓		Micro-SD		104	109 x 47 x 19	2.0	199 (A)
11.6	150		✓	✓	✓		✓	✓	✓	✓	✓	Micro-SD		94	107 x 44 x 15	2.0	479
7.4	90	✓		✓	✓		✓		✓			Micro-SD		116	105 x 50 x 17	2.0	789
9.7	146	✓		✓	✓		✓	✓	✓	✓	✓	MS Pro Duo		99	100 x 47 x 21	2.0	699
12.0	140			✓	✓	✓	✓		✓			MS Micro		110	94 x 49 x 22	2.0	599
9.8	100	✓		✓	✓	✓	✓	✓	✓	✓		Mini-SD		116	111 x 50 x 21	3.2	789
11.4	90	✓		✓	✓	✓	✓	✓	✓	✓		Mini-SD		164	109 x 61 x 26	3.2	1429
10.6	120			✓	✓	✓	✓		✓	✓		MS Micro		90	102 x 46 x 18	2.0	429
14.8	140	✓		✓				✓	✓	✓				93	105 x 45 x 20	0.3	259
10.9	110	✓		✓	✓	✓	✓	✓	✓	✓		MS Micro		113	107 x 48 x 23	3.2	699
13.7	120	✓		✓	✓		✓	✓	✓	✓	✓	MS Micro		95	91 x 47 x 28	0.3	299
12.5	140	✓		✓	✓				✓			MS Micro		95	91 x 47 x 28	0.4	249
10.5	125			✓	✓			✓	✓	✓		MS Micro		93	87 x 45 x 23	1.3	379
8.8	150							✓		✓	✓			90	95 x 47 x 17	na	159
14.0	245													82	104 x 45 x 18	na	89
9.8	165	✓			✓	✓	✓	✓	✓	✓	✓	Micro-SD		103	92 x 49 x 23	0.3	309
8.8	130			✓	✓	✓			✓	✓		Micro-SD		87	93 x 45 x 17	2.0	579 (A)
11.3	170													80	104 x 44 x 18	na	79
7.6	150	✓		✓	✓			✓	✓	✓	✓	Micro-SD		105	107 x 51 x 19	2.0	419
9.3	115										✓			95	93 x 45 x 21	na	99 (B)
11.4	135			✓	✓	✓	✓		✓			MS Micro		88	102 x 45 x 18	2.0	599
11.3	170													79	104 x 44 x 18	na	99
7.9	110			✓	✓	✓		✓	✓	✓		Micro-SD		83	100 x 50 x 16	0.3	159 (C)
5.2	155													73	84 x 45 x 22	0.3	99
5.9	200													70	114 x 47 x 11	na	69

na Not applicable
— doesn't have a camera or doesn't play music.
nt Not tested
(A) Exclusive to Vodafone.
(B) Exclusive to Telstra.
(C) Exclusive to Virgin.

Load 'em up

Most Australians now wash in cold water, so that's how CHOICE tests washing machines. This time, we tested 16 new models on their normal cold-wash cycle, loaded up as usual to their claimed capacity (ranging from 5.5 kg to 9.5 kg). But how many Australians really load their washing machines up to their full capacity?

CHOICE asked 27 subscribers to fill either two top loaders or two front loaders with a variety of sheets, towels, shirts, T-shirts and pillowcases. We asked them to behave as if they were doing a full load of washing at home. On average, they considered the machines to be full when they contained only half their claimed capacity. So what's happening?

It's in manufacturers' interest to market their washing machines as being capable of the biggest load possible. Water and energy efficiency labels are based on the water and energy used per kilogram of washing, so the higher the machine's claimed capacity, the higher its star rating. But if you don't fill your machine to this capacity, you won't receive the full water and energy efficiency promised by the label.

Water and energy efficiency testing is done to the Australian standard's specification. CHOICE would like to see the testing and rating system more closely reflect how Australians use their washing machines. We'll work with Standards Australia to get a larger user trial done and, if its results confirm ours, we'll lobby to change the standard regarding the capacity claimed for washing machine labelling. Depending on the outcome of further research, we'd probably also change our tests to better reflect reality.

Put more in?

Should we simply put more into our machines, given that CHOICE tests show that many of them wash well enough

IN A NUTSHELL

- **A CHOICE user trial of 27 people revealed that they usually only fill their washing machines to 50% of the claimed capacity.**
- **This means that current water and energy ratings can be unrealistice because they're based on what manufacturers claim to be the maximum load.**

WHAT TO BUY

Best Buy indicates a model that's a reasonable performer in its size range and whose combined purchase price and running costs are comparatively low. We don't call a machine a Best Buy unless its brand's reliability also stacks up in our user survey.

Other models in the list are the top performers overall in their size bracket, but they won't be as cheap to buy and run as the Best Buys. We've included top and front loaders in each size range.

See page 40 for profiles of the new models in the *What to buy* list.

Small (up to 5.5 kg)		
NEW MIELE Novotronic W1511 (fr)		$1499
FISHER & PAYKEL MW512 (tp)	BEST BUY	$749
FISHER & PAYKEL GW512 (tp)		$859
Medium (6–7 kg)		
BOSCH Maxx Lifestyle Exclusive WAE26470 (fr)		$1599
NEW BLANCO BFMW7 (fr) (A)		$1199
FISHER & PAYKEL GW612 (tp)	BEST BUY	$995
FISHER & PAYKEL Intuitive Eco IW712 (tp)		$1149
Large (7.5 kg or more)		
ELECTROLUX Ultra Silencer EWF1495 (fr)		$1689
NEW BOSCH Logixx 9 WBB24750 (fr) (A)		$2899
FISHER & PAYKEL Aquasmart WL80T65CW1 (tp)	BEST BUY	$1199
FISHER & PAYKEL Intuitive Eco IW812 (tp)		$1179
LG Inverter WD-1238C (fr)	BEST BUY	$1249

(fr) Front loader.
(tp) Top loader.
(A) Discontinued, but may still be available in some shops.

HOW WE TESTED

- To see how much dirt the machines remove, our testers pin specially soiled swatches onto a standard load of washing and measure how much light is reflected from them before and after washing in cold water and a standard detergent. The more light, the cleaner the machine has washed the swatch.
- To find out how gentle a machine is, they attach swatches of easily frayed fabric to the washing and measure the unfrayed area before and after the wash.
- To check the machines' spin efficiency, testers weigh the clothes before and after the wash to see how much water is left in them.
- To determine rinse performance — how well the machines keep dirt suspended in the water rather than depositing it back on the clothes, and how well they rinse out the detergent — our testers add a marker chemical to the wash. At the end, they take a sample of the water remaining in the clothes to determine the amount of chemical that's left: the less there is, the better the rinse.
- The measure for water efficiency is achieved by measuring the amount of water used in a cycle (on a 'normal' wash program). The score is based on how much water is used for each kilogram of washing — the less the better.

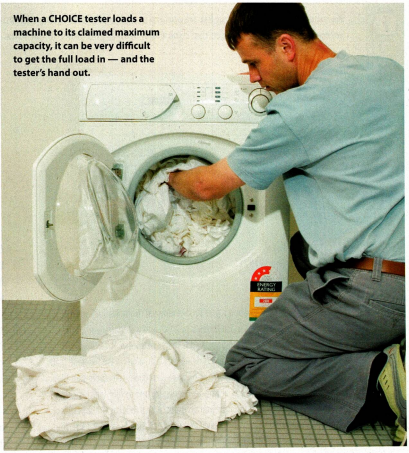
even when they're packed full? The answer isn't simple.

You could experiment with larger loads and see if you're happy with the results. However, bigger loads will make your machine work harder, which could affect how long it lasts or how often it breaks down. CHOICE's reliability ratings come from a survey of readers' experiences, so they're based on real-life use with loads that are probably around half the size of those promised by manufacturers.

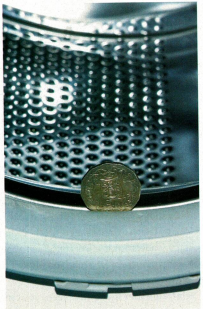
It can also be quite difficult to fill some machines to their claimed capacity. CHOICE's testers do this, and in some cases it means they're packing the laundry in so tightly they can barely get their hand out when they've finished (see the photo, right). Other machines are easier to fill to their claimed capacity.

Another concern with tightly filling a machine is the effect on rinsing. The more tightly items are packed in, the more difficult it is for the water to rinse away dirt and detergent. This particularly applies to front-loading machines, which use far less water than top loaders.

The Water Efficiency and Labelling Standards scheme (WELS) now includes a rinse effectiveness test that machines must pass, to ensure manufacturers don't provide water efficiency at the expense of effective rinsing. Some machines rinse well even with a full load, as our test results show. Others don't, so if you own one of those and start to put more clothes in than usual, you might notice less satisfactory rinsing. >



When a CHOICE tester loads a machine to its claimed maximum capacity, it can be very difficult to get the full load in — and the tester's hand out.



PHOTOS: GENE ROSS

The Electrolux coin problem

We've all put small change through the wash accidentally — but in some cases, this can have catastrophic results for your washing machine.

The ELECTROLUX Ultra Silencer EWF1495 — the best front loader currently tested — has a particular problem with Australian 50-cent coins. There's a small gap between the spin bowl and the rubber door seal big enough for a 50-cent coin to slip through, jamming the mechanism. The only way to remove it is to pull the machine apart completely. Damage caused by coins or other foreign objects isn't covered by the machine's warranty, so consumers this has happened to have had to foot the bill themselves. (It's normal for this kind of damage not to be covered by a washing machine's warranty.)

ELECTROLUX has since changed the barrel design of the model to prevent this problem. All models manufactured from 6 May this year have the new 50-cent-proof barrel. Anyone who's already bought the machine is advised to take extreme care to empty pockets before a wash.

OUT OF BALANCE

If you've already bought a CENTREX CTW60560A and it keeps going out of a balance, get a service call. During our testing, this machine continually went out of balance, so we called in a technician. They removed a part — a sleeve that goes over the trip mechanism that senses out-of-balance loads — and since then, the machine has been working fine. CENTREX says it's corrected the out-of-balance problem in new models.

HOW RELIABLE HAVE CHOICE SUBSCRIBERS FOUND THEM?

See the article on page 8 for the results of CHOICE's latest reliability survey, including washing machines.

The more tightly items are packed in the washing machine, the more difficult it is for the water to rinse away dirt and detergent. This particularly applies to front loaders, which use less water than top-loading machines.

profiles

New models in the *What to buy* list are profiled in rank order within groups. For profiles of the other models in the list, see CHOICE, March 2007, or go to choiceextra.com.au and click on that issue under 'Washing machines' in the index.

Up to 5.5 kg

MIELE Novotronic W1511
Price $1499 **Size** 5.5 kg
Front loader

- This machine has very good scores for dirt removal (using its 30°C 'normal' wash — a true cold-water wash is closer to 20°C) and water efficiency, but heating the water to that temperature adds to its energy use.
- Standard features include a gentle/delicates wash, a fast wash for small loads, a woollens wash, an auto wash, out-of-balance correction, selectable spin speed with a maximum of 1100 rpm, a time-to-go-display and a child safety lock.
- The MIELE also has a minimum-iron program, which reduces the spin speed for fabrics that crease easily (but only if you reduce the load size to 2.5 kg). You can also choose the anti-crease function with every program bar the woollen wash: the drum continues to turn at intervals after the load is finished.
- It has the lowest running costs in its size range.

6–7 kg

BLANCO BFWM7
Price $1199 **Size** 7 kg
Front loader

- This machine has very good dirt removal and water efficiency scores. However, its dirt removal score could be a result of it heating cold water to 40°C for its 'normal' wash. The downside is that it uses more energy to do this.
- Standard features include a gentle/delicates wash, fast wash, a woollens wash, auto wash, extra rinse option and selectable spin speed with a maximum of 1200 rpm.
- It has a time-to-go display, a child lock so your children can't fiddle with the preset buttons, and an anti-creasing option (but it only works if you decrease a standard load from 7 kg to 2.5 kg).
- The black and grey labelling on the controls is less easy to read than some of the others.

about the rest

The table, page 42, gives a summary of performance scores, features and specifications for all models tested. Here's why the rest of the newly tested models didn't make it into the *What to Buy* list — you can clearly see that there's a correlation between good rinse performance and poor water efficiency, and vice versa. However, some other machines manage to get good scores for both.

- The two new SIMPSON Eziset machines, the WHIRLPOOL 6ALSC8255MW3 and its two similar models, and the WESTINGHOUSE LT959S have very good rinse performance but comparatively low water and spin efficiency.
- The ASKO Quattro, AEG L62800, WHIRLPOOL WFS1273AW and ELECTROLUX Eco Valve have very good water efficiency scores but relatively low rinse performance.
- The CENTREX is excellent for rinse performance but has low spin and water efficiency scores. It also continually went out of balance until it was serviced (see *Out of balance*, page 39).
- The SAMSUNG J845 and J1045 are very good at removing dirt and very water-efficient, but their low rinse performance let them down.

what to look for

For full information on what to look for when buying a washing machine, see CHOICE, March 2007, or go to choiceextra.com.au and click on that issue in the index under 'Washing machines'. Some features listed in the table (page 42) are explained here.

- **Out-of-balance correction** Automatically detects and redistributes an out-of-balance load, either by spinning slowly before the full spin cycle or by taking in more water (which is what most top loaders do). If you're concerned about high water usage, opt for a machine without this feature or go for a front loader.
- **Selectable spin speed** This means you can

7.5 kg or larger

BOSCH Logixx 9 WBB24750
Price $2899 **Size** 9 kg
Front loader

- The BOSCH has very good water efficiency, but its 'normal' wash is at 30°C, which adds to its energy use.
- This jumbo-sized machine is easy to load and unload because the door opens very wide. You can squash in a considerable load quite easily.
- It has all the standard features: gentle/delicates wash, fast wash, auto wash, woollens wash, an extra rinse option, out-of-balance correction and selectable spin speed with a maximum of 1200 rpm.
- It has a 'reduced ironing' function that spins clothes more gently.
- It has a childproof lock so children can't fiddle with the settings or open the door while it's running.
- Be aware that this machine's controls are mounted on top at the front, so there's only room for a small dryer to sit on top of it. Otherwise, you'll have to wall-mount a dryer to clear the controls.

change the spin speed on some programs. A higher spin speed will result in drier clothes, while a lower speed is better for delicates and fabrics that are easily creased.

- **Auto-sensing water level** This can help you save water, energy and time by automatically adjusting the water level according to the load and/or fabric type. Some machines also adjust the washing action.
- **Water-saver option** Lets you use less water for rinsing, or reuse sudsy water and/or rinse water.
- **Hot and cold water connections** Some machines need both hot and cold water to operate; others can connect to cold water only and might need a special connector or sealing cap for the hot-water inlet. A machine with a heater (front loaders only) can be particularly useful if you connect to cold water only, as it still gives you the option of doing a warm wash.

For people with a disability

An occupational therapist from the Independent Living Centre (NSW) assessed the newly tested washing machines. Here's what they had to say about the machines in our *What to buy* list:

- If you're in a wheelchair but have good upper body control, an elevated front-loading machine will be the easiest for you to use. The BOSCH Logixx 9 was rated highly, as the door is simple to open, you can reach into the barrel easily to pull out a load, its controls are within easy reach, and it's easy to clean.
- If you have upper limb dysfunction or weakness, the doors on the BLANCO and the MIELE Novotronic are the easiest to open and close. Reaching into these machines isn't difficult, and the controls and dispensers are also reasonably easy to use.
- If you have hand tremors or problems with fine motor function, the best machines will be those with the biggest pushbuttons — test them out in the showroom before you buy. The BLANCO and BOSCH Logixx 9 could be suitable.
- If you have back problems, a front loader mounted so its door is at waist height is the most suitable. You can buy purpose-built pedestals for ELECTROLUX models, but any machine can be built up.
- None of the recommended machines has useful auditory feedback for people with impaired vision, but the MIELE Novotronic's controls would be the easiest to use in this situation. They're also suitable for someone with cognitive impairment.

USING THE TABLE (OVERLEAF)

Scores The overall score is made up of:

- Dirt removal: 40%
- Rinse performance: 20%
- Gentleness: 15%
- Spin efficiency: 10%
- Water efficiency: 15%

As the majority of Australians now wash in cold water straight from the tap, we've applied a small penalty in our overall score to models that can't do a proper cold wash (at around 20°C) on their 'normal' cycle. While the higher wash temperature might slightly increase a machine's scores for dirt removal and rinse effectiveness, it also means it's using more electricity than it would if it were able to do a true 'cold' wash: our penalty compensates for this.

Dirt removal The machine we use to measure this (a spectrophotometer) is more accurate than the human eye: differences of about 6% are visible.
Features See *What to look for*, left, for more on the machines listed in the table.
Dimensions are for the smallest box that fits around the machine, as stated by the manufacturer.
Running costs This is an estimate of how much it'll cost for water and electricity over 10 years if you wash the equivalent of one load every day using a 'normal' cycle, based on 15 cents per kWh of electricity and $1 per 1000 L for water, and including any electricity used when the machine's connected to a power source but not in use.
Price Recommended or average retail, as of July 2007.

>

The water efficiency labelling scheme includes a rinse effectiveness test to ensure manufacturers don't provide water efficiency at the expense of effective rinsing.

PRODUCT		PERFORMANCE								
Brand / model (in rank order within groups)	Type	Overall score (%)	Dirt removal score (%)	Rinse performance score (%)	Gentleness score (%)	Spin efficiency score (%)	Water efficiency score (%)	Water used (L, 'normal' wash)	Cycle time (min, 'normal' wash)	Noise (dB(A)
UP TO 5.5 KG										
# **Miele** Novotronic W1511	Front	75	84	62	76	71	83	47	112	61
Fisher & Paykel MW512	Top / agitator	72	79	90	53	69	52	132	44	65
Fisher & Paykel GW512	Top / agitator	71	77	90	52	69	53	131	45	67
# **Simpson** Eziset 36S550M	Top / agitator	68	70	83	56	61	58	115	49	60
6 KG TO 7 KG										
Bosch Maxx Lifestyle Exclusive WAE26470	Front	76	73	76	79	76	80	69	72	67
# **Blanco** BFWM7 (A)	Front	74	85	72	73	72	82	64	142	61
Fisher & Paykel GW612	Top / agitator	73	83	91	48	69	52	157	47	69
Fisher & Paykel Intuitive Eco IW712	Top / agitator	73	83	89	45	70	56	154	52	62
# **Samsung** J1045	Front	73	80	52	78	67	82	63	145	63
# **Asko** Quattro W6342	Front	72	72	57	78	74	83	53	86	69
# **Samsung** J845	Front	72	80	50	78	60	82	63	146	60
# **AEG** L62800	Front	71	75	58	79	71	83	61	108	64
# **Centrex** CTW60560A (A)	Top / impeller	71	80	97	56	50	43	172	65	63
Haier HWM1260K-AB (B)	Front	71	75	43	76	79	86	41	95	69
Westinghouse Complete Care LT609SA	Top / agitator	70	71	84	59	64	61	116	44	60
# **Electrolux** Eco Valve EWF1087	Front	69	74	45	77	63	83	61	137	62
# **Simpson** Eziset 36S605M	Top / agitator	68	72	83	55	59	58	125	50	58
7.5 KG OR LARGER										
Electrolux Ultra Silencer EWF1495	Front	80	82	80	75	81	82	73	108	60
# **Bosch** Logixx 9 WBB24750 (A)	Front	75	79	71	77	76	81	84	80	63
Fisher & Paykel Aquasmart WL80T65CW1	Top / impeller	75	81	74	58	74	81	76	58	63
Fisher & Paykel Intuitive Eco IW812	Top / agitator	74	80	89	55	72	55	179	55	64
LG Inverter WD-1238C	Front	74 (C)	78	64	78	75	82	67	87	63
Samsung Silver Nano J1455AV	Front	73	80	43	74	79	86	54	131	71
# **Whirlpool** WFS1273AW	Front	73	80	55	77	74	84	60	144	65
[# **Whirlpool** 6ALSC8255MW3	Top / agitator	71	78	86	55	53	58	157	47	62
[# **Whirlpool** 6ALSQ8000MW3	Top / agitator	71	78	86	55	53	58	157	47	62
[# **Whirlpool** 6ALSR7244MW3	Top / agitator	71	78	86	55	53	58	157	47	62
# **Westinghouse** LT959S (A)	Top / agitator	70	72	85	63	66	53	222	67	64
Haier HWM90DD	Top / impeller	69	85	51	53	62	72	125	95	54
Simpson Eziset 22S750L (A)	Top / agitator	69	69	90	60	70	52	180	56	62
Simpson Eziset 22S800L (A)	Top / agitator	66	60	88	65	67	55	182	56	65

 # Newly tested models.
[Similar models.
** Cold = cold tap water.*
ns Not stated.

(A) Discontinued, but may still be available in shops.
(B) A new version (HM1260K-AB) has an anti-bacterial door seal.
(C) This score is different from the last report because we've since applied a penalty for not being able to do a true cold wash on the 'normal' cycle.

FEATURES							SPECIFICATIONS					COSTS	
Delicate/ delicates cycle	Woollens cycle (machine /hand washable)	Out-of-balance correction	Selectable spin speed	Auto-sensing water level	Extra rinse	Water-saver option	Tap connection	Coldest wash temperature for 'normal' wash (°C)*	Capacity (kg)	Dimensions (H x W x D, cm)	Contact	Running costs ($ / 10 years)	Price ($)
'	✓/✓	✓	✓	✓	✓	✓	C only	30	5.5	86 x 60 x 64	www.miele.com.au	303	1499
'	✓/–	✓	✓			✓	H & C, C	Cold	5.5	105 x 56 x 56	www.fp.com.au	570	749
'	✓/–	✓	✓	✓		✓	H & C, C	Cold	5.5	105 x 56 x 56	www.fp.com.au	554	859
'	✓/–	ns				✓	H & C	Cold	5.5	115 x 60 x 64	www.simpson.com.au	503	669
'	✓/–	✓	✓	✓	✓		C only	Cold	7	86 x 60 x 59	www.boschappliances.com.au	368	1099
'	✓/✓	✓	✓	✓	✓		H & C	40	7	85 x 60 x 59	www.blanco-australia.com	794	1199
'	✓/–	✓	✓	✓		✓	H & C, C	Cold	6.5	105 x 60 x 60	www.fp.com.au	674	995
'	✓/–	✓	✓	✓		✓	H & C, C	Cold	7	105 x 60 x 60	www.fp.com.au	673	1149
'	✓/–	ns	✓	✓	✓	✓	C only	Cold	7	85 x 60 x 55	www.samsung.com.au	365	899
'	✓/✓	✓	✓	✓	✓		C only	Cold	6	85 x 60 x 59	www.asko.com.au	279	1899
'	✓/–	ns	✓	✓	✓	✓	C only	Cold	7	85 x 60 x 55	www.samsung.com.au	365	749
'	✓/✓	✓	✓	✓	✓		C only	30	7	85 x 60 x 64	www.andico.com.au	384	1599
	–/–	✓			✓		H & C	Cold	6	96 x 59 x 56	www.centrexaust.com.au	720	439
'	✓/–		✓		✓		H & C	Cold	6	85 x 60 x 57	www.haier.com.au	229	799
'	✓/–		✓			✓	H & C	Cold	6	102 x 60 x 64	www.westinghouse.com.au	503	799
'	✓/–	✓	✓	✓	✓		C only	Cold	7	85 x 60 x 63	www.electrolux.com.au	343	949
'	✓/–	ns				✓	H & C	Cold	6	115 x 60 x 64	www.simpson.com.au	536	719
'	✓/✓	✓	✓	✓	✓	✓	C only	Cold	8	85 x 60 x 60	www.electrolux.com.au	417	1689
'	✓/✓	✓	✓	✓	✓		C only	30	9	94 x 69 x 78	www.boschappliances.com.au	504	2899
'	✓/–	✓	✓	✓	✓		H & C	Cold	8	105 x 65 x 65	www.fp.com.au	385	1199
'	✓/–	✓	✓	✓	✓		H & C, C	Cold	8	105 x 65 x 65	www.fp.com.au	758	1179
'	✓/–	✓	✓	✓	✓	✓	H & C	30	7.5	85 x 60 x 55	www.lge.com.au	467	1249
'	✓/–	✓	✓	✓	✓	✓	C only	Cold	7.5	85 x 60 x 60	www.samsung.com.au	364	1199
'	✓/✓	✓	✓	✓	✓	✓	H & C	30	7.5	85 x 60 x 59	www.whirlpool.com.au	516	1049
'	✓/✓				✓	✓	H & C	Cold	7.5	109 x 69 x 68	www.whirlpool.com.au	1084	1049
'	✓/–				✓		H & C	Cold	7.5	109 x 69 x 68	www.whirlpool.com.au	1084	999
'	✓/–						H & C	Cold	7.5	109 x 69 x 68	www.whirlpool.com.au	1084	949
'	✓/–	ns	✓	✓	✓	✓	H & C	Cold	9.5	120 x 70 x 73	www.westinghouse.com.au	903	1269
'	–/–	✓	✓	✓	✓		H & C	Cold	9	108 x 69 x 69	www.haier.com.au	632	1499
'	✓/–						H & C, C	Cold	7.5	108 x 70 x 73	www.simpson.com.au	748	899
'	✓/–					✓	H & C, C	Cold	8	108 x 70 x 73	www.simpson.com.au	749	949

The player's the thing

Digital music players come in many colours, shapes and sizes, but ultimately your needs are the determining factor when you choose one.

Some machines come with lots of software for 'ripping', organising and transferring music to the player; others have none. The latter usually rely on free software such as Apple iTunes or Windows Media Player for these functions, which means you're not tied to a particular brand. This could be an advantage, should you decide to switch at some stage.

Our testers were pleasantly surprised to find that all the machines are at least OK for ease of use. The simpler models, such as the APPLE iPod Shuffle and SONY NWS205F, are as straightforward as they come, but there are many others in the test that are almost as easy. Adding more features increases complexity, and this can result in a product that's less easy to use, so consider carefully whether you really need all the bells and whistles. We found some of the controls fiddly or difficult to use, so it's a good idea, if possible, to try before you buy.

With sound, there's a noticeable difference between the best and worst players, but all will sound better if you use good-quality earphones. >

IN A NUTSHELL

- **In this latest test, we included 15 digital music (MP3) players (13 flash and two hard drive models), ranging in price from $59 to $600. Three of the flash players and four hard drive models are still available from our previous test, so they're listed in the table (page 46) too.**
- **Battery life varies dramatically among the models tested, and some machines come with interesting extras.**

what to look for

- **Rechargeable battery** Some of the players in the test use AAA alkaline batteries (rechargeable or otherwise). Others have a built-in rechargeable (LI-Ion) battery pack that you can recharge from your computer's USB port (some may require a cable) and/or from an AC adapter. Batteries generally charge more quickly from an AC adapter than from a USB port. The table (page 46) lists which players can still be used while they're recharging.
- **Compatibility** If you use a Mac or an older PC, check that the MP3 player and its software are compatible with your computer.
- **Larger screens** These are useful if you've lots of music to organise, or want to store and view images and video. If you want to use them to watch movies or display your photos, though, only the largest are likely to be useful.
- **File types supported** If you want to use your MP3 player for things other than listening to music, check whether it supports the relevant file types — there's a comprehensive list online at choice.com.au. The most common file format for photos is JPG; for video, it's AVI.

what to buy

Which model to buy depends on how you want to use your MP3 player.

Running about

Sporty types who like to tune in while they work out want a player that's light and easy to use, and they don't come much lighter than the APPLE iPod Shuffle at 16 g. If you want a player that's specifically designed for exercising, the SONY NWS205F's pedometer, armband and holder make it a good choice.

APPLE iPod Shuffle

Price $109
Storage type Flash **Capacity** 1 GB
Good points

- Very easy to use.
- Very easy to transfer music to player.
- Small and light, with a handy clip.

Bad points

- Only has two playback modes: shuffle or sequential.
- No onboard tone or equaliser controls.
- No display screen.
- You can't select individual tracks.

SONY NWS205F

Price $249
Storage type Flash **Capacity** 2 GB
Good points

- Very easy to use.
- Very easy to transfer music to player.
- Small and light.
- Inbuilt pedometer, calorie counter.
- Can vary the music selection based on your speed.

Bad points

- Some data displayed on the small screen is difficult to read, particularly outdoors.
- Has one especially small control button.

The functions on MP3 players vary widely: choose the one that suits your usage pattern.

Cool movers

Whether you're commuting, travelling long distances or just sitting around enjoying music, a small, well designed and easy-to-use MP3 player makes your life simpler. Both the 'Running about' machines could also fit in this category, but the six profiled here are also small and light enough to do the job.

APPLE iPod Nano
Price $199
Storage type Flash **Capacity** 2 GB
Good points
- Very easy to transfer music to player.
- Very good battery life score.
- Large screen makes navigating through your music collection easy.

Bad points
- No provision for a clip or strap.

CREATIVE Zen V Plus
Price $170
Storage type Flash **Capacity** 2 GB
Good points
- Very easy to transfer music to the player and perform most basic tasks.
- Large screen makes navigating through your music collection easy.

Bad points
- Doesn't accept long file names, so it's difficult to load tracks with similar names.
- Have to click on a system tray icon to sync (synchronise files between the player and a computer), rather than being able to do it within the supplied software.
- Needs backlight to see the screen and gives no indication of status, as the screen powers off almost immediately when transferring music. The onscreen status icons are, in any case, pretty poor.
- Not easy to tell when it's safe to disconnect from the PC.
- Navigation control (joystick) is small.
- Screen is reflective in sunlight.

SONY NWS705F
Price $329
Storage type Flash **Capacity** 2 GB
Good points
- Very easy to transfer music to the player.
- Inbuilt, active noise cancellation.
- Excellent battery life score.

Bad points
- Hard to read some data on the small screen.

SAMSUNG YP-K3JQB
Price $179
Storage type Flash **Capacity** 2 GB
Good points
- Very easy to transfer music to player.
- Very good battery life score.
- Large screen makes navigating through your music collection easy.

Bad points
- No provision for a clip or strap.
- Supplied software is tedious to install.

SAMSUNG T9
Price $219
Storage type Flash **Capacity** 2 GB
Good points
- Very easy to use.
- Very easy to transfer music to player.
- Bluetooth for cordless earphones (purchased separately).
- Large screen makes navigating through your music collection easy.

Bad points
- Supplied software is tedious to install.
- Some of the data displayed on the screen is small and difficult to read.

SANDISK Sansa e250
Price $199
Storage type Flash **Capacity** 2 GB
Good points
- Capacity can be increased using a microSD card.
- Very easy to transfer music to the player and perform most basic tasks.
- Large screen makes navigating through your music collection easy.

Bad points
- Navigation controls are hard to use.
- Hard to read display in sunlight.
- Supplied lanyard is small.
- Need backlight on to see screen.
- Images and video must be converted using supplied software.

Big files

Digital photographers are always looking for extra storage space, and watching video on a small screen is also becoming more popular. All the players can store data files direct from your computer, but if you want to see pictures or video, you'll need a bigger screen and a player that can handle the file type. The flash players in this test are a bit small for serious storage, but most of the hard drive models have lots of room. The APPLE 80 GB iPod Video has a hefty hard drive combined with a very good battery score and a functional screen, making it a good choice overall.

APPLE 80GB iPod Video
Price $479
Storage type Hard drive
Capacity 80 GB
Good points
- Very easy to transfer music to player.
- Very good battery life score.

Bad points
- No provision for a clip or strap.
- You have to buy an attachment to transfer images directly from your camera (expect to pay around $48), and video can only be viewed in Apple's special format.

about the rest

The others we tested are good performers overall, but:
- The COWON D2, IRIVER X20 and LG FM-37 aren't as easy to use as the others, though the COWON D2 has the best battery life of any we've tested, lasting more than 40 hours.
- The ASTONE Rumba 800 and LEGEND Jazz have poor battery scores; the APPLE iPod 30 GB, iAUDIO X5 and LASER batteries are better, but still not good.
- Of the hard drive models, the IRIVER E10 6GB has the least storage but is as light as some flash models. Its battery life is very good and it's very easy to use.
- The CREATIVE Zen Vision W and COWON A2 are heavy and bulky but have the biggest screens: a good choice for images/video rather than music.

PHOTOS: PAUL SANTELMANN

Adding more features increases the complexity of the player, and this can result in a product that's less easy to use, so consider carefully whether you really need all the bells and whistles before you settle on a particular model.

< Extra features

Besides playing music, some of the products we tested have other features you may or may not find useful.

- At the not-so-useful end is the inbuilt speaker in the LASER VOM 1G, which supposedly lets you listen to music without using earphones. It's small and has pretty poor sound, without much volume.
- The LG has a touchscreen that controls almost all its functions. This gives it a sleek design but unfortunately makes it relatively difficult to use.
- One player, the SAMSUNG T9, is compatible with Bluetooth (a wireless technology for connecting devices over short distances). It could be handy if you don't like earphone cables, but you'll need Bluetooth-enabled headphones to use it, and they aren't included. The T9's Bluetooth can't be used to transfer music or data files.
- The SONY NWS205F claims to be showerproof, has a pedometer and a calorie counter (converting to kilojoules doesn't seem to be an option), and can vary the music depending on your speed. The pedometer seems to work quite well but we didn't test it for accuracy.
- The SONY NWS705F has noise-cancelling technology incorporated, but you need to use the special earbuds supplied for it to work. ■

	PERFORMANCE					FEATURES					SPECIFICATIONS			
Brand / model (in rank order within groups)	Overall score (%)	Ease of use score (%)	Sound score (%)	Battery score (%)	Best measured battery life (hours)*	Playback while recharging (USB)	Mac-compatible	FM radio	Store and display photos (JPG)	Store and play video	Dimensions (mm, H x W x D)	Weight (g)	Capacity (GB)	Screen size (mm)
FLASH														
Apple iPod Shuffle	86	93	83	77	16.0		✓				27 x 41 x 11	16	1	None
Sony NWS705F	85	83	83	93	30.5			✓			88 x 28 x 15	47	2	22 x 7
Sony NWS205F	84	91	80	76	15.0			✓			97 x 20 x 21	26	2	22 x 5
Apple iPod Nano	83	75	89	85	28.0		✓		✓		88 x 38 x 5	41	2	32 x 2
SanDisk Sansa e250 2GB	83	86	81	79	17.0	✓			✓		88 x 43 x 14	74	2	29 x 3
Samsung T9	82	84	83	77	18.0			✓	✓	✓	83 x 43 x 11	47	2	29 x 3
Creative Zen V Plus 2GB	80	85	78	74	14.0	✓	✓		✓	✓	67 x 43 x 16	44	2	30 x 2
Samsung YP-K3JQB	80	76	81	88	23.5			✓	✓		45 x 97 x 8	53	2	29 x 3
Cowon D2	79	65	83	100	40.5		✓	✓	✓	✓	49 x 78 x 17	90	4	51 x 3
Ministry of Sound MOSMP071X20	78	89	72	68	11.5	na	✓				34 x 95 x 20	41	2	30 x 9
LG FM-37	77	67	87	76	15.5			✓	✓	✓	87 x 50 x 8	66	2	37 x 4
iriver X20	76	69	84	76	15.5			✓	✓	✓	99 x 49 x 15	72	2	46 x 3
Laser VOM-1G	75	85	73	57	8.0		✓	✓	✓	✓	48 x 81 x 15	61	1	40 x 3
Astone Rumba 800	73	83	80	37	4.0	na		✓			80 x 31 x 24	37	1	28 x 1
Laser GM-V10	70	73	72	60	8.5	✓	✓	✓	✓	✓	82 x 44 x 10	61	2	39 x 3
Legend Jazz 2GB	69	81	70	41	4.0		✓				63 x 42 x 17	40	2	22 x 1
HARD DRIVE														
Apple 80GB iPod Video	82	76	88	80	18.0	✓	✓		✓	✓	104 x 62 x 15	155	80	52 x 4
iriver E10 6GB	79	81	74	85	21.5	✓		✓	✓	✓	96 x 45 x 15	76	6	28 x 2
Creative Zen Vision W	77	70	90	63	10.0			✓	✓	✓	76 x 135 x 22	294	60	97 x 5
Apple iPod 30GB	75	74	84	59	8.5	✓	✓		✓	✓	104 x 62 x 12	130	30	53 x 4
Cowon A2 30GB	73	67	84	64	10.0	✓	✓	✓	✓	✓	79 x 134 x 23	302	30	89 x 5
iAudio X5 30GB	73	68	85	58	8.0		✓	✓	✓	✓	103 x 61 x 21	152	30	36 x 2

HOW WE TESTED

- Our testers checked how easy the players are to set up, to play back music, and to rip and transfer music files using supplied software or, if none was supplied, Windows Media Player (or iTunes, for the iPods). They also evaluated how easy each player is to carry around.
- They listened to each player with the earbuds supplied and also measured frequency response, signal-to-noise ratio, total harmonic distortion and channel separation.
- To find out how long you can play music without recharging (or replacing) the battery, they measured each player's battery life. First, they conditioned the batteries by fully charging and discharging them three times, then ran each player at least twice until the batteries ran out.

battery	Minimum system requirements	Supplied software	Contact	Price ($)
x Li-Ion	MacOSX 10.3.9; Win2000 SP4 or XP SP2	None	www.apple.com/au/	109
x Li-Ion	Win2000Pro SP3	SonicStage 4.0.00.05080	www.sony.com.au	329
x Li-Ion	WinXP	SonicStage 4.0.00.05080	www.sony.com.au	249
x Li-Ion	MacOSX 10.3.9; Win2000 SP4 or XP SP2	None	www.apple.com/au/	199
x Li-Ion	Win XP; Win Media Player 10	Sansa Media Converter 1.1 (for photos and video only)	www.sandisk.com	199
x Li-Ion	Win2000	Samsung Media Studio 5.1.4.2	www.samsung.com/au	219
x Li-Ion	Win XP SP1	Zen V Series Media Explorer R2, ZENcast Organizer, Creative MediaSource 5, Windows Media Player 10	au.creative.com	170
x Li-Ion	WinXP SP2	Samsung Media Studio 5.1.4.1	www.samsung.com/au	179
x Li-Ion	MacOSX; Win98	Jetshell 4.50	www.cowonglobal.com	329
x AAA	MacOSX; Win98SE	None	ministryofsound.com.au	90
x Li-Ion	Win98SE	LG Media Center 1.0.2006.09111	au.lge.com	249
x Li-Ion	WinXP	Iriver Plus 3.2.5.3	www.iriver.com.au	179
x Li-Ion	MacOSX; Win98	AVIconverter 2.0	www.laserco.com.au	100
x AAA	Win98SE	None	www.astone.com.au	59
x Li-Ion	MacOSX; Win98	AVIconverter 2.0	www.laserco.com.au	170
xAAA	Not stated	None	www.legendmemory.com	89
x Li-Ion	MacOSX 10.3.9; Win2000 SP4 or XP SP2	None	www.apple.com/au/	479
x Li-Ion	Win 98SE, ME, 2000, or XP	iriver Plus 2	www.iriver.com.au	239
x Li-Ion	WinXP SP1	Comprehensive suite of software	au.creative.com	600
x Li-Ion	MacOS X 10.3.9, Win 2000 SP4 or Win XP SP2; iTunes 7	None	www.apple.com/au/	349
x Li-Ion	Win 98SE, 2000, or XP; DirectX 9; Windows Media Player 9, QuickTime 6	JetShell Pro 1.1 (file management), JetAudio VX 1.1 (audio management), Win98 USB drivers	www.cowonglobal.com	559
x Li-Ion	MacOS X, Win 98SE, 2000, ME, or XP; Linux 2.2	JetShell Pro 3.20 (file management), JetAudio VX 6.1 (audio management), Win98 USB drivers	www.cowonglobal.com	349

USING THE TABLE

Scores The overall score is made up of:

- Ease of use: 40%
- Sound quality: 40%
- Battery life: 20%

Battery life scores are calculated so that a player that lasts 36 hours or more gets 100% and one that lasts six hours gets 50%.

Playback while recharging (USB) means that it's possible to listen to your music while the player is connected to your PC and recharging.

Mac-compatible Other than the Apples, players' functionality may be reduced compared with use on a PC.

Capacity is in gigabytes — 2 GB can store around 500 songs of average length.

Software supplied Apples use iTunes, which can be downloaded free from the Apple website; the others without specific software can also use iTunes or Windows Media Player.

Price Recommended retail, as of July 2007.

* *Based on at least two tests.*
na Not applicable: they use rechargeable batteries.

Rain supreme

Unless you buy a new car every couple of years, you'll probably have to buy a set of new tyres at some point — at the latest when the tread wear indicators show your tyres have reached the minimum legal limit.

If you're shopping for tyres, you don't have to get the same kind that your car left the factory with, nor the same size — check your owner's manual or ask a tyre dealer to find out which sizes you can fit. However, getting different-sized tyres may mean you need different rims as well, and the whole thing can get costly.

CHOICE tested 15 models of the size 195/65R15, costing $72–$207, most of them V-rated for speed but some H-rated ones as well (see page 50 for what this means). This size is currently used on a number of popular small cars such as the Ford Focus, Holden Astra, Honda Civic, Mazda 3 (our test car) and VW Golf.

IN A NUTSHELL

- **Only one model performed just as well in the wet as it did in the dry.**
- **Just 5 km/h can make the difference between holding a corner and going out of control.**

Grip vs durability

Each tyre design varies in its tread pattern and rubber mix and is a compromise between a number of requirements, such as grip and durability.

Generally, a soft tyre provides better grip but also leaves more rubber on the road, so won't last as long as a harder model. Racing tyres are an extreme example: they're very soft and practically glue the car to the track, but may only last for part of one race.

Our cornering and braking tests (see *How we tested*, far right, for details) assess the tyres' grip, but not their durability. Tyre wear is difficult and expensive to test properly; several European consumer organisations and motoring clubs carry out a joint test, part of which is a convoy drive over 10,000 km, using identical cars. Unfortunately, we can't take part in their test, because most European tyres are different from Australian ones. And we can't afford to run a similar test of our own. However, some tyres have a tread wear rating (see *How to read a tyre*, page 10) that can give you some idea of how long a tyre should last compared with others used in the same conditions.

Cornering

We tested the tyres at various speeds in dry and wet conditions:

- In the dry, all the models mastered our test corner at 80 km/h, scoring 80–100%. At 85 km/h, all the tyres let the car drift a little but still kept it in the lane, except the MAXXIS (which crossed lanes) and the CONTINENTAL (which had trouble holding the lane). None managed to hold the test car in its lane at 90 km/h, so we didn't score that speed.
- In the wet, all the tested models were equally good at 75 km/h, so we didn't score that speed. At 80 km/h, the field spread out: while our test car stayed perfectly on track only with the CONTINENTAL, it ended up in the other lane at a very early point and with no traction when the DUNLOP, SAVA and TOYO were fitted. No model mastered 85 km/h, but some were worse than others.

As you'd expect, most tyres perform worse in the

what to buy

We tested the tyres in fairly extreme situations that you'd normally only encounter in emergencies. In everyday driving conditions, all the tested models are likely to be OK, and the differences indicated by our scores may not be noticeable.

However, it's arguable that emergency performance is what really counts, and the best all-rounders for that are those pictured here. The other models provided much less grip in our wet cornering test.

As you can see from the range of prices, paying more doesn't necessarily get you a better tyre.

YOKOHAMA C.Drive $154

BF GOODRICH Sport T/A $157

GOODYEAR Ducaro GA $140

wet than in the dry. But while it's only a relatively small difference for the models in the *What to buy* list (below), the ones further down the table (page 51) provide much less grip in wet conditions. And there was one surprising result — while the CONTINENTAL wasn't as good as most others in the dry, it lost none of its grip and was clearly the best in the wet.

Significantly, our tests show that 5 km/h can make the difference between your car holding a corner quite comfortably and going out of control.

Braking

The YOKOHAMA had the shortest braking distances in the dry, the MAXXIS the longest in both dry and wet conditions.

Distances were longer in the wet than in the dry in all cases except (again) the CONTINENTAL, which took only marginally longer to stop and achieved the same score in the wet as in the dry.

The difference in average stopping distances between best and worst tyres in both dry and wet conditions was about 15% — a bit more than a metre when braking from 50 km/h, and about 3.5 m from 80 km/h. In an emergency situation, that distance can mean the difference between stopping in time and having a crash.

Our stopping distances are best-case scenarios for the following reasons:

- **ABS** Our results were helped by the anti-lock braking system (ABS) fitted to our test car. In an emergency situation like that simulated in our tests, you just slam on the brakes and the electronics ensure the car stops as quickly as possible without locking the wheels.

  When driving a car without ABS, you have to adjust the force you apply to the brake pedal to prevent the wheels from locking up. This can be tricky, and makes it much harder to achieve stopping distances as good as those in our tests.
- **Reaction time** Our test driver knew he was going >

HOW WE TESTED

- **Cornering** Our testers assessed how well the tyres kept the car in the set lane, at speeds of 80 km/h and 85 km/h in dry and wet conditions, using a right-hand corner with about 40 m radius.

  The tests were carried out with the tyres fitted in random order, and without the driver knowing which was fitted. The testers repeated the cornering on a different day and in a different random order. They also used a control (two sets of the same model) as an additional check for variations in the test that weren't due to model differences.
- **Braking** Our testers measured the distance to come to a complete standstill in emergency braking tests, from driving speeds of 50 km/h and 80 km/h, in both dry and wet conditions.
- They also carried out **rolling noise** measurements at the driver's left ear at 50 km/h and 100 km/h. At each speed, there was less than 3 dB difference in the noise levels between the models — you wouldn't be able to notice that. However, the tyres tested are new, and bigger differences between models may develop with increased wear. Also, our test was done on a smooth racetrack surface — there may be more variation on rougher, day-to-day roads.

KUMHO Solus KH15 $186

MICHELIN Energy MXV8 $207

PIRELLI P6000 Powergy $200

CONTINENTAL ContiEcoContact 3 $185

FIRESTONE Firehawk TZ100 $135

There was one surprising result in the cornering tests. While the Continental wasn't as good as most other tyres in the dry, it lost none of its grip and was clearly the best in the wet.

< to have to brake — in an emergency, you won't. Half a second's reaction time at 50 km/h means an additional 7 m stopping distance; at 80 km/h, it's an additional 11 m.

Speed rating: H vs V

We mainly looked at models with a V speed rating, as these are required in some cars, such as our Mazda 3 test car. However, some popular brands don't have V-rated (up to 240 km/h) tyres in the tested size, so we included their models with a lower rating (H, up to 210 km/h) instead. The KUMHO Solus KH15 comes in H and V rated versions, and we tested both.

The results for the KUMHO show that the higher speed rating gave us better performance, and a look at the table shows a trend: three of the H-rated models are in the bottom four.

However, it's not black-and-white — a good H-rated model (CONTINENTAL) can clearly outperform a not-so-good V-rated one (SAVA). ■

How to read a tyre

Each tyre has standard markings that allow you to pick the right type for your car. It's a confusing mix of letters and numbers, and of measurements in mm and inches.

Here's what it all means, using the code for the tested size, P195/65R15 91V:

- **P** — stands for passenger car tyre.
- **195** — this is the section width (in mm) when the tyre is fitted to the recommended rim, inflated to the recommended pressure, and not under load. The section width is the distance between the tyre's exterior sidewalls.
- **65** — this is a percentage describing the tyre's profile or aspect ratio. It's the ratio between the tyre's section height (distance from the bottom of the rim to the top of the tyre) and its section width — in this case, 65%.
- **R** — stands for radial, which is the most common construction method for passenger car tyres.
- **15** — this refers to the diameter (in inches) of the rim the tyre should be fitted to.
- **91** — this is the load rating index, and tells you the maximum weight one tyre can carry (in this case, it means 615 kg). Other examples: 84 (500 kg), 86 (530 kg), 89 (580 kg), 93 (650 kg), 95 (690 kg).
- **V** — this is the speed rating index, and tells you the maximum speed at which the tyre can travel safely (in this case, 240 km/h). Other examples: S (180 km/h), T (190 km/h), H (210 km/h), W (270 km/h).

Tread wear rating

Tyre models that are marketed in the US have to have a **tread wear rating** as part of the Uniform Tyre Quality Grading System (UTQG) operated by the US government National Highway Traffic Safety Administration. If the same tyre is available here you can use the information too.

Under the system, a tyre's tread wear is measured under controlled conditions involving an 11,500 km drive on a specified test course, and compared to a 'standard' tyre with a rating of 100. A rating of 200 indicates that the tested tyre should last twice as long as the standard model. So the higher the number, the longer you can expect a tyre to last.

However, the rating is comparative only. Real-life wear of a tyre depends on a number of aspects, such as the road surface, tyre pressure, wheel alignment and driving style.

Also part of the UTQG system, and printed on the tyre sidewall next to the tread wear rating, are:

- A **traction rating** that grades the tyre's wet braking traction (AA, A, B or C, with AA being best).
- A **temperature rating**, which indicates a tyre's ability to dissipate heat (A, B, C, with A being best).

THANK YOU

We'd like to thank:

- **Mazda for providing the test car.**
- **Morgan Park Raceway in Warwick, Queensland, for its efforts to ensure a smooth test.**

PRODUCT	PERFORMANCE					SPECIFICATIONS		
Brand / model (in rank order)	Overall score (%)	Dry cornering score (%)	Wet cornering score (%)	Dry braking score (%)	Wet braking score (%)	Speed rating	Contact	Price ($)
Yokohama C.Drive	79	90	60	90	80	V	www.yokohama.com.au	154
BF Goodrich Sport T/A	78	90	60	85	80	V	www.bfgoodrich.com.au	157
Goodyear Ducaro GA	78	90	60	85	80	V	www.goodyear.com.au	140
Kumho Solus KH15	78	90	60	85	80	V	www.kumho.com.au	186
Michelin Energy MXV8	78	90	60	85	80	V	www.michelin.com.au	207
						/	www.pirelli.com.au	200
						H	www.tyres4u.com.au	175
						/	www.bridgestone.com.au	135
						/	www.bridgestone.com.au	168
						/	www.tyres4u.com.au	72
						/	www.dunloptyres.com.au	174
						H	www.kumho.com.au	169
						/	www.goodyear.com.au	121
						H	www.toyo.com.au	145
						H	www.bobjane.com.au	105

USING THE TABLE

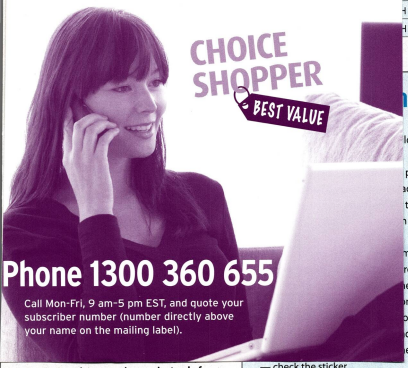
Scores The overall score is a combination of dry and wet cornering scores (30% each) and dry and wet braking scores (20% each).

Price Recommended retail as of May/June 2007. Tyre prices can vary widely, so shop around for the models you're interested in — you may be able to find them at well below the RRP.

Missing brand We originally included a GT RADIAL Champiro GTX-65, and it performed well (overall score 78%). However, the manufacturer has since told us that this model is no longer available in Australia.

Save with CHOICE Shopper!

Get great deals when buying major home appliances over $100. Just tell us the model you're after, the best price you've been quoted and we'll do our best to beat it.



Phone 1300 360 655

Call Mon-Fri, 9 am–5 pm EST, and quote your subscriber number (number directly above your name on the mailing label).

...nance

...lopascals (kPa)

...pressure
...acturer —
...the driver's
...n the petrol

...mendations
...re's cold, not
...e time — so
...n down the
...ourney.
...d such as a
...er pressure

— check the sticker.

- Driving with under-inflated tyres uses more petrol, adversely affects the car's handling and may lead to tyre damage.
- Check the pressure regularly — make it a habit each time you fill up with petrol.
- And don't forget to check the spare's air pressure when you do the other tyres. There's nothing worse...

Maintenance tips

- When you check the pressure, also do a visual check for objects embedded in the tread, such as stones or glass.
- Check for uneven wear, which could indicate a problem with the car's steering or suspension.
- Run your hands over the tread and sidewalls to identify any bubbles, cuts or cracks.
- Keep an eye on the tyres' tread wear indicators, which show the minimum legal tread of 1.6 mm. The indicators are small bars spaced across the grooves of the tyre's tread pattern. Replace your tyres when the tread level reaches the indicators — at the latest.
- Rotate the tyres regularly — for example, at every service.
- When putting on new tyres, have them balanced and a wheel alignment done.

space-saver (narrower) spare instead of a full-size one. If you have to use it, follow the instructions in your user manual. There's likely to be a speed limitation, and you're only supposed to drive on it for a short distance, to get you home or to the nearest tyre fitter. If you use it over longer distances or at higher speeds, you may damage your car.

Breadwinners

BREADMAKERS

Does the tantalising aroma of freshly baked bread wafting through the house sounds like a nice wake-up call? Programming your breadmaker to have a warm, fresh loaf ready when you wake up is only one of the features we found in our test of six breadmakers, priced from $100 to $250.

Don't think you have to be as skilled as CHOICE's home economist to produce the perfect loaf. All you need to do is weigh up the ingredients (or, even easier, buy a premix) and the breadmaker will then mix, knead, raise and bake the bread for you.

Our tests showed the BREVILLE BB290 is the best, making good bread both from a premix and from basic ingredients. But if you're looking for a cheap, no-frills machine that does the basics well, the SUNBEAM BM2100, at just $100, also got good scores for making white bread, but isn't as easy to use.

One factor in your choice could be whether you want a traditional horizontal loaf or are happy with a vertical shape (the risen crust is on a short rather than a long side). Most of the tested breadmakers have a horizontal pan, but the two in the *What to buy* list deliver a vertical loaf. We didn't include the BREVILLE BB420 or GEORGE FOREMAN GFBM1000, both of which have horizontal pans, in the *What to buy* list because they didn't perform so well in some areas (see *About the rest*, right).

Want more?

Whether you're happy with a premix from the supermarket or you'd prefer to make the bread from scratch, the breadmaking machines will enable you to produce delicious variants on your standard white loaf. Some can also make dough for bread rolls, pizza and focaccia and can be used for cakes, damper and even home-made fruit jam, though we only used them for bread made with yeast. The table lists the major types of bread, dough, etc, each model can make.

The SUNBEAM BM7800 also has a gluten-free program, which allows you to use gluten-free flours such as chickpea or rice flour as an alternative to wheat flour.

Just because a machine has no program for a specific kind of bread, this doesn't mean you can't make it. Check the machine's recipe book to see if it offers a baking mode for the bread you want. For a full list of features and programs, see *What to look for*, page 54. >

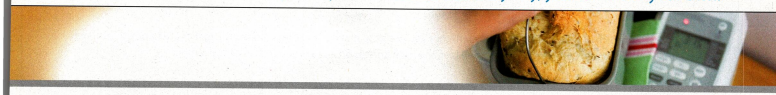
IN A NUTSHELL

- **Whether you use a premix or create your bread from scratch, all breadmakers can do more than make a standard white loaf — you can make many kinds of bread: rolls, pizza dough, focaccia, yeast-free bread, cakes … even jam.**
- **A higher price doesn't necessarily get you better bread, but it can buy you more features and programs.**

about the rest

- The BREVILLE BB420 and GEORGE FOREMAN GFBM1000 are the most expensive breadmakers tested but they aren't as easy to use and don't make bread as well as the cheaper BREVILLE BB290 in the *What to buy* list. They could be worth considering, though, if you prefer a horizontal loaf.
- While the $199 SUNBEAM BM7800 is easy to use and has a good range of programs, it got only an average score for baking white bread from basic ingredients.
- Being cheap and easy to use probably doesn't compensate you for the BREVILLE BB280 having the lowest scores for making bread both from scratch and from a premix. The SUNBEAM BM2100 in the *What to buy* list is a more sensible choice if you want to keep to the lower price point.

PRODUCT	PERFORMANCE					FEATURES					PROGRAMS	
Brand / model (in rank order)	**Overall score (%)**	**White bread from basic ingredients score (%)**	**White bread from premix score (%)**	**Fruit distribution score (%)**	**Ease of use score (%)**	**Progress indicator**	**Power failure protection**	**Automatic fruit dispenser**	**Removable lid**	**Viewing window**	**Sweet**	**French**
Breville BB290	78	80	75	100	73		✓			✓	✓	✓
Breville BB420	72	75	65	100	67	✓	✓	✓	✓	✓	✓	✓
George Foreman GFBM1000	72	60	80	80	73	✓	✓		✓	✓	✓	✓
Sunbeam BM2100	70	70	75	80	60				✓	✓	✓	✓
Sunbeam BM7800	69	60	70	80	73	✓	✓	✓	✓	✓	✓	✓
Breville BB280	66	55	65	80	73		✓			✓	✓	✓



what to buy

BREVILLE BB290
Price $170 Vertical loaf
Good points
- The highest score for white bread made from basic ingredients.
- Excellent fruit distribution.
- Has programs for yeast-free bread.
- Controls are easy to use.
- Instructions are easy to understand, and include excellent recipes.

Bad points
- No progress indicator.
- Blade/paddle can be difficult to remove.
- The lid can only be removed for cleaning by removing screws.
- No fruit and nut dispenser: you have to add them by hand.

Cheap and no frills

SUNBEAM BM2100
Price $100 Vertical loaf
Good points
- A good score for white bread made both from basic ingredients and from a premix.
- Compact and easy to store.
- A very good price.

Bad points
- Has programs for relatively few bread types and other products, though it's worth checking the instruction manual for alternative ways to achieve different types.
- No delayed start/timer or progress indicator.
- No cord storage.
- Equal-lowest ease of use score.
- No choice of crust colour.
- Only one size of loaf (750 g); all the other models can deliver a bigger loaf.

WHERE'S PANASONIC?

The PANASONIC SD-251 and SD-253 were originally included in this test but have since been discontinued, and so far not replaced by new models.

USING THE TABLE

Scores The overall score is made up of:
- White bread made from basic ingredients: 30%
- White bread made from a premix: 30%
- Fruit distribution: 10%
- Ease of use: 30%

Features and programs See *What to look for*, page 54, for more on these.

FOR TYPES OF BREAD / OTHER PRODUCTS									SPECIFICATIONS					
Continental / Italian	Damper	Yeast-free	Gluten-free	Pasta dough	Pizza dough	Bake only	Cake	Jam	Shape of loaf	Loaf colour options	Loaf size options	Dimensions (W x D x H, cm)	Contact	Price ($)
		✓			✓	✓		✓	Vertical	Light, medium, dark	750 g, 1 kg	23 x 35 x 33	1300 139 798	170
		✓		✓	✓	✓		✓	Horizontal	Light, medium, dark	750 g, 1 kg, 1.25 kg	40 x 26 x 33	1300 139 798	250
					✓	✓	✓	✓	Horizontal	Light, medium, dark	500 g, 750 g, 1.5 kg	41 x 26 x 32	1800 427 842	250
					✓		✓		Vertical	None	750 g	26 x 35 x 29	1800 025 059	100
	✓	✓	✓	✓	✓	✓	✓	✓	Horizontal	Light, medium, dark	750 g, 1.0 kg, 1.25/1.5 kg	43 x 28 x 33	1800 025 059	199
		✓			✓	✓			Horizontal	Light, medium, dark	750 g, 1 kg	28 x 38 x 28	1300 139 798	100

One factor in your choice of breadmaker could be whether you prefer to make a traditional horizontal loaf or are happy to turn out loaves with a vertical shape. With a vertically shaped loaf, the risen crust is on a short rather than a long side.

what to look for

Size

- Consider the type and size of the bread pan: do you want a horizontal or vertical loaf, how much does it yield, how many people will it serve?
- Consider the size of the machine. Do you have enough bench space to leave it out? If it has to live in a cupboard, will you use it?

Features

The table on page 52 shows which models have the following features:

- **Bake and watch monitor/ progress indicator** This indicates the stage of the breadmaking process.
- **Power saver/ failure protection** This saves your bread in a power interruption. Our machines ranged from five minutes up to one hour.
- **Add ingredients signal or beep** Lets you know when to add nuts, cheese, herbs, etc, that are included after basic kneading. Some models have an **automatic fruit and nut dispenser** that adds them for you.
- A **removable lid** makes cleaning easier.
- **Viewing window** Enables you to look in while the bread is being mixed and kneaded and when it's baking and rising.

Features not in the table

- **User-programmable settings** Allows you to program your own personal recipe times and baking temperature. (Most of the machines tested have this feature.)
- **Manual stop/pause function** Can be stopped at any time for 10 minutes before continuing. Useful for braiding, or making pull-apart or filled bread. (The BREVILLE BB420, GEORGE FOREMAN and SUNBEAM BM7800 have this feature.)
- **Delayed start** Most breadmakers can have a delayed start of at least eight hours, which is useful for preparing fresh bread for breakfast. (All except the SUNBEAM BM2100 have this feature)

Pre-programmed settings

Besides making white, wholemeal and wholegrain bread, breadmakers can be programmed to produce some of the following (see the table for model details):

- **Sweet** For breads that need additional ingredients such as dried fruits, nuts and chocolate. A timer beeps when it's time to add them.
- **French or continental/Italian** Reduces the amount of kneading time and increases rising time, for a crisper crust.
- **Damper or yeast-free** Used to make muffin-style or damper breads.
- **Gluten-free** Allows the substitution of non-gluten flours.
- **Pasta** Prepares dough for pasta, which can then be used in a pasta machine or rolled out and made by hand.
- **Dough/pizza dough** Makes dough for rolls, doughnuts, pizza bases and foccacias, ready to be baked in the oven.
- **Bake only** Uses the baking process only, for example if you're using frozen dough.
- **Cake or batter breads** Allows you to make cakes or packaged cake mixes, or non-yeast breads such as banana bread.
- **Jam** Allows you to use fresh fruit to make homemade jam.

HOW WE TESTED

- CHOICE's home economist made loaves of white bread from ingredients, according to the basic recipe provided with each machine. She also made white bread from a premix.
- She visually assessed the loaves for the evenness of crust colour, the uniformity of mixing, shape of the loaf, crust texture and the even distribution of small bubbles through the loaf.
- She made raisin bread, following the manufacturer's recipe, and assessed it for the distribution of fruit, and whether the fruit was chopped (which can happen if the fruit's added too early or kneaded too harshly).
- To test ease of use, she looked at how easy the pan is to remove and place back into the shaft and whether the models have easy-to-use controls and settings. She also checked whether they have a digital display and progress indicator, and whether they're easy to wipe over and disassemble for cleaning.

TESTER'S BAKING TIPS

- **It's important that you measure the ingredients accurately. Ideally, use metric weighing scales.**
- **Always use bread flour, unless stated otherwise.**
- **Don't use flour with a protein level below 11.5% (such as some no-name brands have).**
- **Don't use self-raising flour to make bread with yeast unless the instructions ask for it.**
- **Add the ingredients to the bread pan in the order given in the recipe.**
- **Use dry yeast, not compressed (wet) yeast.**
- **Don't use hot water or other hot liquids.**
- **Never use the delayed-start timer for recipes that contain perishable ingredients (such as milk or eggs).**

THE CHOICE GUIDE TO BABY PRODUCTS

NEW 12th edition!

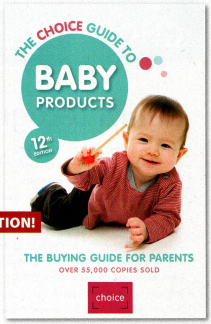
Essential buying advice for new parents

Our independent guide to the best baby products on the market is now in its 12th edition! Packed with practical information, *The CHOICE Guide to Baby Products* is the result of extensive research and testing by our CHOICE experts. In the latest edition, find reliable advice on:

- Cots **NEW**
- Highchairs **NEW**
- Jogger strollers **NEW**
- Four-wheel strollers
- Twin strollers
- Disposable nappies **NEW**
- Child car restraints **NEW**

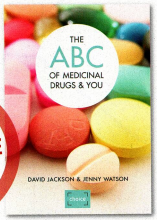
There's also general information on bathtime, bedtime and changing accessories, feeding, toys, playpens, walkers and useful 'What to look for' checklists. Plus there's information about safety around the home, and advice on other issues confronting new parents, such as childcare, immunisation, SIDS and postnatal depression.

$22.50



BUY 3 OR MORE BOOKS AND POSTAGE IS FREE!

ALL CHOICE BOOKS ARE CHEAPER HERE THAN STANDARD RETAIL

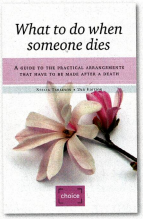


THE ABC OF MEDICINAL DRUGS AND YOU

NEW TO CHOICE!

This helpful book addresses the many issues surrounding drug development and supply, and details some of the important issues around common prescribed and non-prescribed drugs in Australia.

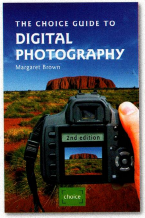
$26.95



WHAT TO DO WHEN SOMEONE DIES

A practical and easy-to-read guide to the formal and legal matters that need to be addressed after someone dies. It includes useful information for people who would like to plan ahead and sort out their affairs before their own death: the importance of making a will, estate planning, power of attorney and financing funerals.

$22.50



THE CHOICE GUIDE TO DIGITAL PHOTOGRAPHY

NEW 2nd edition!

Never before has digital photography been more accessible or affordable. *The CHOICE Guide to Digital Photography* covers all aspects of digital photography, from what to buy, to how to print and store your pictures once those special moments have been captured.

$26.95

See all our great titles at choice.com.au/books

HOW TO ORDER

Call 1800 069 552, 9 am–5 pm, Mon–Fri, Sydney time, and quote CB/0709

choice.com.au/books

Postage and handling: $6 for 1–2 books, free for 3 or more

Banks recognise poor practice on penalty fees

Bank penalty fees hurt consumers and discriminate against low-income households. This important admission about their inequitable impact came from John MacFarlane, Chief Executive of ANZ, in response to CHOICE's campaign to axe unfair penalty fees.

While definitive data is hard to find, we estimate that out of the $4 billion in total bank fees, consumers pay at least $500 million annually in unfair penalty fees. We've argued that not only is the practice unreasonable but that it's potentially illegal. Citibank and St George responded by scrapping their inward cheque dishonour fees, and other institutions are reviewing their practices in other areas.

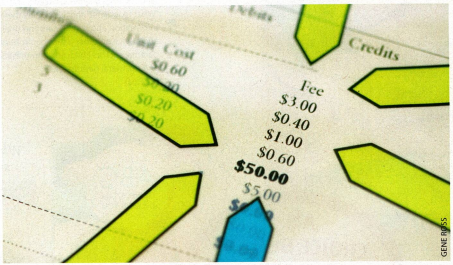
Consumers have told us how they've been caught out by excessive penalty fees. In one case, more than $3660 in fees was charged over three years; in another, a pensioner lost a third of her income in a week to bank fees.

It's encouraging that change is in the air but, in CHOICE's view, only regulatory reform can solve the problem:

- Inward cheque dishonour fees should be scrapped, and other fees, such as over-limit fees for credit cards, should be removed or brought in line with the true costs to the lender.
- The Australian Securities and Investments Commission (ASIC) needs power to ensure that any other bank and credit penalty fees are related to the actual costs incurred by the institution.
- Better communication between the financial institutions and their customers also needs to be part of the solution. CHOICE is calling on banks to establish SMS or email notification that a credit limit has been reached or that insufficient funds are available to process an impending direct debit transaction.

The increasing volume of penalty fees suggests that poor practice has become the industry norm, with little competitive incentive to change that practice. These reforms would turn that practice around.

Standard letters to reclaim penalty fees (along with some success stories) are available at fairfees.com.au. ■



CAMPAIGN NEWS

DO NOT CALL REGISTER UPDATE

It's clear Australian consumers are sick of unsolicited phone calls — the Do Not Call Register has seen immense support, with over one million phone numbers registered, and it's still growing.

The register was a much needed initiative, but there are still too many loopholes. Even if you're registered, it doesn't stop telemarketing calls from politicians, religious organisations and charities, among others. Even market research calls aren't considered to be telemarketing calls, so they also continue to be allowed. In fact, the Australian Communications and Media Authority (ACMA) removed the prohibition on unsolicited Sunday calls for any 'research' call, whether from a recognised research body or not.

CHOICE would like to hear your experiences and views on the Do Not Call Register. To participate in a short survey, please go to choice.com.au/donotcall. Thanks in advance for helping us with this research.

TIME TO TIGHTEN STANDARDS ON FOOD ADVERTISING TO KIDS

The Australian Communications and Media Authority (ACMA) is reviewing the Children's Television Standards (CTS). The CTS regulate programming of children's TV shows, appropriate content of children's programs and advertising to children.

The only CTS provision that specifically addresses food and beverage advertising requires that ads for food products don't provide misleading or incorrect information about the nutritional value of the product. Other than this, regulation of food marketing to children is left largely to industry codes — and these are failing to address community concern about children being bombarded with ads for unhealthy foods.

CHOICE wants the CTS strengthened so they can address:

- **The disproportionate volume of advertising of unhealthy foods compared with healthy foods.**
- **The need for advertising restrictions to apply during programs popular with children, such as reality TV shows and *The Simpsons*, not just programs specifically designed for children.**

CHOICE also wants a simplified complaints process that makes it easy for consumers to complain about inappropriate food marketing to children. We'll be presenting a submission calling for ACMA to protect children from the unhealthy influence of food marketing.

RECALLS & bans

Nowadays there are so many product recalls we may not be able to print all of them in CHOICE. For comprehensive recall information go to the Product Recalls Australia website: www.recalls.gov.au. If you don't have web access, call the Product Safety Policy section of the ACCC on (02) 6243 1262.

Companies often rent 1800 numbers for a couple of months after a recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

TOYS Mattel has recalled various **Fisher-Price Licensed Character Toys**, including **Dora the Explorer** and **Sesame Street** toys, sold between 1 May 2007 and 3 August 2007. All affected toys have a date code between 109-7LF amd 187-7LF marked on the product, and were sold alone or as part of a set. The affected products and their product numbers are:

Product number	Description
390543	Sesame Street Shape Sorter
883993	Dora The Explorer Adventures with Dora
900573	Sesame Street Mini Music Instruments
902673	Sesame St Ernie's Splashin Fun Bath Toy
931993	Sesame St Press & Go Racers Asst
934913	Sesame St Mini Instruments Asst
936153	Sesame St Splashin' Fun Tub Puzzle
937803	Sesame St Musical Lights Phone
B69663	Barney Best Manners Phone
B78883	Sesame St Shake, Giggle & Roll
B80653	Dora The Explorer Say It Two Ways Mini
B96173	Dora The Explorer House Figures Asst
B96203	Dora The Explorer's Talking House
C12113	Sesame Street Giggles Gabbers Asst
G38253	Dora The Explorer Talking Yamanos Van
G38303	Dora The Explorer Collectible Mini Adventure
G51153	Sesame Street Giggle Guitar
G57523	Dora The Explorer Add-On Rooms Accessory Asst
G97173	Sesame Street Giggle Doodler
H46283	Sesame Street Net Bag of Water Toys
H83673	Dora The Explorer Deluxe Dollshouse Bundle
J45173	Sesame Street Giggle Cell Phone
J65373	Sesame Street Giggle Toolbelt
J96923	Dora The Explorer's Pony Place

The problem Surface paints on the toys may contain increased levels of lead which, if ingested, may have health ramifications.

What to do Remove the toys from the reach of children. To arrange for the return and refund of the affected toys, ring Mattel on 1800 674 753, Monday to Friday, 8 am to 5 pm, EST, or go to www.service.mattel.com.

TOY Learning Curve Australia has recalled various **Thomas & Friends Wooden Railway Toys**, sold in Australia between January 2005 and June 2007. The items affected are; Brown and Yellow Old Slow Coach, Deluxe Sodor Fire Station, Red 'Sodor Mail' Car, Red Baggage Car, Red Coal Car, Red Fire Brigade Train and/or Truck, Red Water Tanker Truck, Red Hook & Ladder Truck, James Engine and/or #5 Tender, James Engine and/or #5 Tender with Team Colours, Lights & Sounds James Engine and/or #5 Tender, Red Musical Caboose, Red Skarloey Engine, Red Sodor Line Caboose, Red Stop Sign, Yellow 'Sodor Cargo Co.' Cargo Piece, Yellow & Green Box Car and Yellow Railroad Crossing Sign.

The problem The surface paint contains lead, which is toxic if ingested by young children, and could cause adverse health effects.

What to do Remove the toys from the reach of children. To receive a replacement or similar item, post the recalled item to TWR Recall, PO Box 653, Mount Waverley 3149, including your mailing address. For more information call 03 9550 3600 or email service@rc2aust.com.au.

BABY WALKER Hunter Leisure has recalled **Babyclub Baby Patrol Baby Walker**, APN 9335671570448, sold at Target stores since September 2005.

The problem Certain items on the toy tray, such as the traffic light stickers and the steering wheel, can easily detach, posing a choking hazard to young children.

What to do Stop using it. Remove the tray from the walker and store it out of the reach of children. Call 1800 099 178 to make arrangements to receive a replacement tray.

BABY PYJAMA Minihaha & Hiawatha has recalled **Bebe by Minihaha baby long sleeve romper/pyjama**, sizes 0000–1, in the following style numbers: PW7-050 (rose print), PW7-070 (giraffe print, grey or pink), XW7-133 (pink print), XW7-306 (blue with red print). They were sold in retail outlets from 5 March 2007.

The problem The press studs could detach and pose a choking hazard to babies.

What to do Stop using the garment. Return it with your details to Minihaha & Hiawatha P/L, 96 Gipps Street, Collingwood 3066, to obtain a refund.

PHARMACEUTICAL Johnson & Johnson has recalled **Combantrin Suspension** 50 mg/mL, 60 mL bottle, batch number 87255, ARTG No. 10747. The batch number is located on the top of the product pack, as well as on the back of the bottle label.

The problem The contents don't mix effectively after following the pack instructions. This can cause a dosing error when using the product.

What to do Don't use it. Return it to the place of purchase for a refund, or send it to Johnson & Johnson Pacific P/L, Combantrin, Reply Paid 74903, Locked Bag 5, Broadway 2007, or for more information call 1800 733 821.

PANEL SOCKET OUTLET ETD has recalled **Panel Socket Outlet**, model ID numbers AC-10F, AC-15F, AC-20F and AC-10R, which can be found on the round panel plate. The panel socket outlet is generally installed in pool equipment and industrial-type power rails for use in 19-inch racks. The affected outlets would have been installed after 1 August 2006.

The problem Under certain circumstances when an Australian 2- or 3-pin plug is inserted or withdrawn from the panel socket outlet, the round panel plate can come apart from the socket, exposing the live terminals on the socket inside the equipment.

What to do If you have equipment with this socket, stop using it and contact ETD on 02 9602 7040.

POWER ADAPTOR EB Games has recalled **PowerWave PSP Compatible AC Power Adaptors**, model PSP-100, sold at EB Games stores between 1 February 2007 and 1 June 2007.

The problem The adaptors are defective and potentially unsafe.

What to do Unplug the adaptor from the mains power supply and stop using it. Return it to any EB Games store for a refund, or for more information go to www.ebgames.com.au or call 07 3860 7777.

PAINT Berger has recalled **Berger BreatheEasy Low Sheen Acrylic White Base** 642-61030, and **Berger BreatheEasy Flat Acrylic White Base** 634-61030. The affected products have batch numbers GG6-901Ê, GL6-0911 and GB7-2364 on the bottom of the container.

The product The paint is labelled 'solvent free', but contains a small amount of solvent that may present a health risk to consumers who are hypersensitive to chemicals. The risk is only present when the product is wet, not once dried.

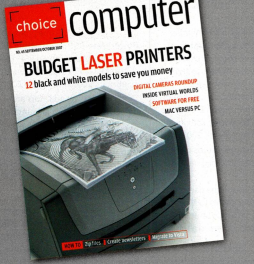
What to do Return it to the place of purchase for a refund, or call 13 25 25 for more information.

BICYCLE Overstock Outlet has recalled **Freestyle Bicycle**, 20-inch steel frame, model numbers SP20SBX302 and SP20SBX302RED, sold through the internet site www.oo.com.au between 15 July 2006 and 19 April 2007.

The product The bicycle doesn't meet all the requirements of the relevant safety standard for pedal bicycles.

What to do To arrange to return the bicycle frame for a refund, call 02 8336 6700, 9 am to 5 pm, Monday to Friday.

Don't be left behind! Stay up-to-date with CHOICE *Computer*


choice computer
NO. 43 SEPTEMBER/OCTOBER 2009
BUDGET LASER PRINTERS
12 black and white models to save you money
DIGITAL CAMERAS ROUNDUP
INSIDE VIRTUAL WORLDS
SOFTWARE FOR FREE
MAC VERSUS PC
NOW TRY Zip files, Gmail, homefront, Windows 7

In the latest issue:

- **FREE software** — what you can get FREE online.
- **Digital challenge** — SLR and compact cameras put to the test.
- **Digital life** — how to put yourself into cyberspace.
- **Laser printers** — you can get a good one for half the price.
- **Windows migrate** — how to transfer your files and settings to Windows Vista.

SUBSCRIBE TODAY!

A one-year subscription is just $42 for personal CHOICE magazine subscribers ($48 for non-subscribers).

To subscribe go to
choice.com.au/magazines
or call us toll-free on 1800 069 552
(please quote INS/0709).

'No commercial use' policy. Our ratings and reports may not be used in advertising or for any other commercial purpose. CHOICE will take all steps to prevent commercial use of its materials, its name, and the name of its publications and products. Please report any apparent violation to CHOICE, 57 Carrington Road, Marrickville 2204; phone (02) 9577 3399; fax (02) 9577 3355; email auscconsumer@choice.com.au.

Permissions. Reproduction of CHOICE, CHOICE Books and other CHOICE publications, in whole or in part, is forbidden without prior written permission (and is never permitted for commercial purposes). Address requests to CHOICE Consumer Services at the address above.

Your privacy. We're committed to protecting your privacy, and abide by Australia's National Privacy Principles. We never sell or give our mailing lists to other organisations. If you'd like to read our privacy policy, it's on our website or we can send you a copy.

All literary and artistic works and compilations of information are the subject of Australian and international copyright © Australian Consumers' Association 2007. CHOICE™ is a trademark of the Australian Consumers' Association. All rights reserved.

COUNCIL MEMBERS The Australian Consumers' Association is governed by an honorary council elected by the voting members. (For information about voting membership, call (02) 9577 3399.) Members of the council give their time without reimbursement, and are not engaged as principals in industry, advertising or sales. **Council: Chair** Jenni Mack. **Deputy Chair** Joan Staples. **Members** Robin Brown, William Davidson, Rachel Dixon, Sandra Milligan, Ian Spight, John T D Wood.

CHIEF EXECUTIVE OFFICER Peter Kell. **Executive assistant** Georgina Saltos. **DEPUTY CEO** Norm Crothers. **EDITORIAL DIRECTOR** Anny Friis **CHOICE Editor** Jane Mackenzie. **Senior copy editor** Kerri Tyler. **Writers/ journalists this issue** Birgitt Baader, Chris Barnes, Karina Bray, Rachel Clemons, Alan Dooley, Holly Enriquez, Denis Gallagher, Michael Hohl, Ella Kennedy, Kim Laurie, Uta Mihm, Liz Munn, David Oakenfull, Chris Ruggles. **CONTENT GENERATION** Chris Barnes, Rachel Clemons, Alan Dooley, Bellinda Dunn, Denis Gallagher, Michael Hohl, Uta Mihm, Liz Munn, David Oakenfull, Martha Psirouklis, Chris Ruggles. **CHOICE ONLINE Manager** Linda Magee. Chris Ruggles. **Editor** Katie Leach. Rehmana Khan, Glenn Mason, Amira Meyer, Elizabeth Toumasatos. **PRODUCTION Manager** Darrell Sly. **Creative director** Cynthia Vge. **Art director** Michelle Haenstein. **Photographer** Gene Ross. **TESTING AND BUSINESS OPERATIONS General manager** Norm Crothers. **RESEARCH AND TEST CENTRE Manager** John Ashes. **Laboratory: Manager** Klaus Neuscheler. Jo Bektash, Antonio Bonacruz, Brian Champion, Geoff Day, Peter Honath, Mohamed Jawahir, Fiona Mair, Scott O'Keefe, Neill Patterson, Benjamin Rossetto, Matthew Steen, Norbert Suto, Petr Valouch. **Buying** Dorothy Kneale, Sonja Scodeller. **Research** Tiina Hendrikson, Christine Shaday, Joe Sydney. **Test Research** John Ashes. **CONSUMER SERVICES Manager** Bill Stuart. Darran Ashton, David Hill, Silvana Ristevska, Alice Richards, Ailin Sun. **FINANCE** Vivien Power. Jeanette Dwyer, Kang Zhu Ge, Sera Raicama. **ADMINISTRATION** Gail Slaviero. **LIBRARY** Shirley Colless, Ruben Reyes. **ICT Manager** Stephen Macdonald. Ferdous Azad, Charles Ly. **SUBSCRIPTIONS Manager** Bill Stuart. **Supervisor** Nootaya Hwang. **Co-ordinator** Thelma Bracken. Lynda-Maree Morgan, Fiona Pollard, Phasathorn Woottiarporn. **MARKETING AND COMMUNITY General manager** Mary Harris. **COMMUNITY RESEARCH Manager** Lara Martkovic. Katherine Rock, Stephanie Tye. **MARKETING** Kellie Thomson, Zac Godkin. **QUALITY AND HUMAN RESOURCES General manager** Barbara Manchester. **QUALITY ASSURANCE AND CONTROL Manager** Pam Gardiner. **Assistant manager** Corinna Horrigan. **Verifiers** Ben Bridges, Sharon Caudurn, Tracey Clancy, Lawson Lobb, Karen Palmer, Alister Sharp, Melanie Stopic. **POLICY AND CAMPAIGNS General manager** Gordon Renouf. **MEDIA** Christopher Zinn. Ria Voorhaar. **POLICY** Elissa Freeman, Clare Hughes, Catherine Raffaele. **Campaigns co-ordinator** Lizzie Ball. **Marketing statistics** by GfK Marketing Services. **Financial data** supplied by Cannex. **Financial services information** supplied by Morningstar.

The Australian Consumers' Association is a not-for-profit company limited by guarantee. ACN 000 281 925 ABN 72 000 281 925. Registered office: 57 Carrington Road, Marrickville 2204, Australia.

www.CHOICEextra.com.au

This is a free website for CHOICE magazine subscribers

It's an index of CHOICE articles going back to Jan/Feb 2002, with links to PDFs of many of them so you can read them immediately, without having to go and find your issue of CHOICE. To use this website, you need to log in with your subscriber number, which is the number directly above your name on the mailing label that comes with the magazine. If you see the ⊠ symbol in a magazine article, it means there's extra information on CHOICEextra that we couldn't fit into the magazine.

CHOICE SHOPPER

CHOICE SHOPPER BEST VALUE

Call 1300 360 655 All you need is the model name and number you want to buy, the price you want to beat, and your CHOICE subscriber number (from the mailing label with the magazine). CHOICE Shopper is available to personal subscribers only, and you can use it to buy major laundry, kitchen and home entertainment appliances, cameras and computers (all costing over $100), cars (over $10,000), lawnmowers, tyres and car batteries.

12 MONTH index

HOW TO USE THIS INDEX

Bold type indicates a test, survey or trial report, normal type indicates other articles.

* indicates an update of a previous report, additions or corrections to reports, small follow-up items, letters or recalls. For space reasons, the index generally doesn't include Choice Cuts and other small pieces.

Air conditioners
- large split-system **Oct**
- small split-system **Jun**

Airline satisfaction **Jun**
Anti-aging cosmetics Jul
Appliance reliability Sep

Baby food Jul
Bank penalty fees Jul, Sep*
Barbecues, gas **Dec**, Mar*
Batteries, AA, rechargeable and non **Jan/Feb**
Beer, premium **Aug**
Blower vacs **May**
Breadmakers **Sep**
Breakfast cereals May
Bulk-billing Jan/Feb

Camcorders **Dec**
Cameras, digital **Oct, Apr**
Carbon-neutral flights Jul
Carpet cleaning Jun
Cars
- ANCAP crash tests **Mar**
- child car restraints **Dec**
- GPS navigation systems **Jan/Feb, Aug**
- tyres **Sep**
- used car safety Jan/Feb

Ceiling fans **Sep**
Cereal bars **Oct**
Cereals, breakfast May
Champagne/sparkling wine **Dec**, Jan/Feb*
Cheese, parmesan **Jul**
Child/baby concerns
- baby food Jul
- car restraints **Dec**
- childcare Nov
- cots **Oct**, Nov*
- high chairs **Jul**
- nappies **Apr**
- obesity Oct
- strollers, four-wheel **Sep**
- strollers, three-wheel **Apr**
- water safety products Dec

Childcare Nov
Chocolates **Dec**
Coffee grinders **Jul**
Coffee machines **Mar**, Jul*
Cola, diet Apr
Convection heaters **Jun**
Cordless phones **Jan/Feb, Jul**
Cosmetics, anti-aging Jul
Cots **Oct**, Nov*
Cream and substitutes Sep
Credit card interest charges Oct
Credit from stores Dec
Crosstrainers **Jan/Feb**
Currency conversion fees **May**

Dental costs Jul
Detergent, laundry **Apr**
Diet cola Apr
Digital camcorders **Dec**
Digital cameras **Oct, Apr**
Digital music players **Mar, Sep**
Digital TV explained Dec
Dishwasher detergents **Jan/Feb**
Dishwashers **Jan/Feb, Aug**
Dog leads, retractable **Dec**
Drugs, prescription prices **Dec**
DVD/hard disc recorders **Nov**
DVD players, portable **Oct**

EBay, buying tickets on Aug
Electricity, green Jun
Espresso machines **Mar**, Jul*
Ethical investing Sep
Exercise equipment, crosstrainers **Jan/Feb**

Family tree software **Jan/Feb**
Fans, ceiling **Sep**
Fees, bank penalty Jul, Sep*
First aid, natural treatments Mar
Flights, carbon offsets for Jul
Flu vaccinations Apr, Jul*
Fluoride in water Mar
Food
- 10 fat foods Jan/Feb
- baby food Jul
- breakfast cereals May
- cereal bars **Oct**
- chocolates **Dec**
- cream and substitutes **Sep**
- diet cola Apr
- iced tea **Nov**
- meat, free-range Mar
- milk May
- olive oil **Jun**
- organic food Aug
- parmesan cheese **Jul**
- vegetables, fresh vs frozen vs canned **Apr**
- vegetables, frozen mixed **Aug**
- yoghurt **Jun**

Food processors **Nov**
Fridges, mixed sizes **Nov, May**

Gadgets, useless Jan/Feb
Gas barbecues **Dec**, Mar*
Gas heaters, unflued **May**
Genealogy software **Jan/Feb**
Glass cleaners **Oct**
GP, choosing one Jan/Feb
GPS car navigation systems **Jan/Feb, Aug**
Graters **Mar**
Green power Jun
Grinders, coffee **Jul**

Hair colour, grey coverage **May**
Hair removal
- home **Sep**
- professional Jun

Headphones, noise-cancelling **Aug**
Health
- bulk-billing Jan/Feb
- childhood obesity Oct
- choosing a GP Jan/Feb
- dental costs Jul
- flu vaccinations Apr, Jul*
- fluoride in water Mar
- laser eye surgery May
- natural first-aid treatments Mar
- prescription prices **Dec**
- throat lozenges Jun

Heaters
- convection **Jun**
- gas, unflued **May**

High chairs **Jul**
Home and contents insurance May
Home theatre systems **Jan/Feb**
Hospital insurance Aug
House-minding organisations Oct

Iced tea **Nov**
Inkjet printers **Nov**
Insurance
- home and contents May
- hospital Aug

Internet/phone bundling Aug
Investment, ethical Sep

Juice, açai, goji, noni, etc Sep

Kettles **Oct**

Laser eye surgery May
Laundry detergent **Apr**
Lawnmowers, petrol, mulch/catch **Nov**
LCD TVs, 80 cm **Apr**
LG steam washer/dryer **Aug**

Mascara **Jan/Feb**
Meat, free-range Mar
Microwave ovens **Jun**
Milk May
Mobile phones **Sep**
Mobile phone repairs Jan/Feb
MP3 players **Mar, Sep**

Nanotechnology Jul
Nappies **Apr**
Natural first-aid treatments Mar
Noise-cancelling headphones **Aug**

Obesity in children Oct
Olive oil **Jun**
Organic food Aug
Ovens
- microwave **Jun**
- wall/under-bench, electric **Apr**

Paper shredders **Mar**
Parmesan cheese **Jul**
Pet food Jun
Phone/internet bundling Aug
Phones, cordless **Jan/Feb, Jul**
- mobile — see Mobile phones

Pillows, buying guide May
Plasma TVs, 106 cm **Dec**, Jan/Feb*
Portable DVD players **Oct**
Power, green Jun
Prescription prices **Dec**
Price survey, supermarkets **Jul**
Printers, inkjet **Nov**

Refrigerators — see Fridges
Reverse mortgages Mar, Apr

Set-top boxes **May**
- with PVR **Apr**

Shonkys, The Nov
Showerheads, water-efficient **Mar**, Apr*
Shredders, paper **Mar**
Sofa beds Aug
Sparkling wine/champagne **Dec**, Jan/Feb*
Strollers
- four-wheel **Sep**
- three-wheel **Apr**

Supermarket price survey **Jul**
Supermarket pricing Apr

Tanning, DIY **Nov**
Tea, iced **Nov**
Telephones — see Phones
Television
- 80 cm, LCD **Apr**
- 101–107 cm, LCD and plasma **Jul**
- 106 cm, plasma **Dec**, Jan/Feb*
- digital TV explained Dec
- set-top boxes **May**
- with PVR **Apr**

Throat lozenges Jun
Tickets, buying on eBay Aug
Travel money May
Tyres **Sep**

Unit pricing Apr

Vacuum cleaners **Nov, Jun**, Jul*
Vegetables
- fresh vs frozen vs canned **Apr**
- frozen mixed **Aug**

Walking poles **Aug**
Wall/under-bench ovens, electric **Apr**
Washer/dryer, steam **Aug**
Washing machines **Mar, Sep**
Water-efficient showerheads **Mar**, Apr*
Water safety products for children Dec
Wedding dress, buying Jan/Feb
Window cleaners **Oct**
Wine, sparkling **Dec**, Jan/Feb*

Yoghurt **Jun**

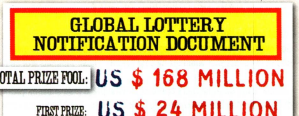
HARD word

The prize for best entry goes to K Angel for the amazing plastic bag. Thanks also to P Murray, J Stockdale, W Fayle, R Anderson, A Pilat, A Waldren, R Strange, M Besley, A Nicol, R Cascuna and P Lindsay for their contributions to this month's *Hard Word*.

If you have any examples you think deserve to be on this page, send them to *The Hard Word*, CHOICE, 57 Carrington Road, Marrickville 2204. Please don't email us your entries — we need the originals.

OPEN 7 DAYS
CORINDA POINT
SEAFOOD SALAD & TAKEAWAYS
Catering for all occasions
ALL PRICES INCLUDE GST
The best quality cholesterol oil only used.

For the lard lovers among us

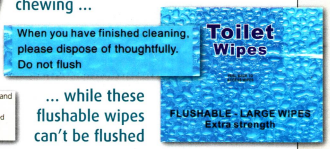


Tipped off?

Reader J Stockdale was warned off this offer to 'invest' his hard-earned cash in a foreign lottery scheme by what appears to be a Freudian slip. He's obviously no fool.

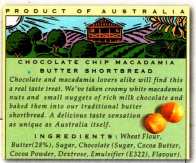
Item No.85860
Pet LIFE
Cotton
DOG TOY
CHEW BONE · LARGE
be used as a throw and retrieve or tug toy device to keep your dog fit and healthy. It helps to massage gums and keep teeth clean.
Use under supervision. Do not allow your pet to play with this toy if chewed or damaged.

This chew toy ain't for chewing ...


When you have finished cleaning, please dispose of thoughtfully. Do not flush
Toilet Wipes
FLUSHABLE · LARGE WIPES
Extra strength

... while these flushable wipes can't be flushed

Highfalutin' promises for a plastic bag ...


PRODUCT OF AUSTRALIA
CHOCOLATE CHIP MACADAMIA BUTTER SHORTBREAD
Chocolate and macadamia lovers alike will find this a real taste treat. We've taken creamy white macadamia nuts and small nuggets of rich milk chocolate and baked them into our traditional butter shortbread. A delicious taste sensation as unique as Australia itself.
INGREDIENTS: Wheat Flour, Butter(28%), Sugar, Chocolate (Sugar, Cocoa Butter, Cocoa Powder, Dextrose, Emulsifier (E322), Flavour).

CHOCOLATE BISCUIT SUGAR, WHEAT FLOUR, COCOA MASS, VEGETABLE OIL, CONFECTIONER'S MILK, MILK SOLIDS, GOLDEN SYRUP, GLUCOSE (FROM WHEAT), BUTTER, COCOA BUTTER, STARCH (WHEAT), HUMECTANTS (E422, E1520, E1505 FROM WHEAT), EGG, E170, E110, E102, EMULSIFIERS (E322 FROM SOY), E471, E476), COCOA POWDER, SALT, ANTIOXIDANTS (E307, E306), RAISING AGENT (E500), FLAVOURINGS, FOOD ACID (E330), ACIDITY REGULATOR (E501), MINERAL SALT (E339). RASPBERRIES (0.01%). CONTAINS CHOCOLATE (34.8%). MAY CONTAIN TRACES OF EGG, NUT OR SESAME.

Get out the magnifying glass

These 'Double Chocolate & Raspberry' biscuits contain only 0.01% raspberry … But they still fare better than this so-called 'Macadamia Shortbread' — with no macadamia listed.

Imported from where?

Christmas Island, perhaps? It's kind of Australia, but kind of not …

DEEP SPRING
Natural Mineral Water
NATURAL
CONTAINS: AUSTRALIAN SPARKLING NATURAL MINERAL WATER.
MADE IN AUSTRALIA FROM IMPORTED AND LOCAL INGREDIENTS.